



**PSYCHODYNAMICS**  
**AND THE**  
**ALLERGIC PATIENT**





# PSYCHODYNAMICS AND THE ALLERGIC PATIENT

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## Panel Discussion

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*An official publication of the  
American College of Allergists*

THE BRUCE PUBLISHING COMPANY  
SAINT PAUL AND MINNEAPOLIS  
1948

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Printed in the United States of America

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# Introduction

**T**HE time has come to consider seriously the revision of our

the specialist in allergy but also by the general practitioner. A comparatively large fraction of the cases of chronic in die incide

asthmatic paroxysms which upset the balance of the cardiovascular and respiratory systems. Actually, more than five million people in this country have asthmatic symptoms or are potentially asthmatic.

The treatment of the uncomplicated cases of hay fever, or of skin rash which immediately follows the ingestion of a given food or drug, is comparatively simple. The basic immunologic concept of allergic reactions in this particular group of cases provides the best means to the therapeutic end. There remain, however, many more complex cases of

medicine teaches that the solution of medical problems inevitably requires aid from related basic sciences. For example, in the early studies of diabetes, pathology led the way; but it was necessary to call on biochemistry to implement the use of insulin in the therapy of this disease. The allergist has utilized immunologic theory and experiment in the study of the allergic patient. But it now appears timely, as far as the therapy of the allergic patient is concerned, to take advantage in an organized



fashion of the great advances made in psychoanalytic psychology since the beginning of the century, and to adapt these advances, as far as possible, for application by both the allergist and the general practitioner. } A systematic merger, therefore, between immunology and psychology in the field of allergy seems to be required to implement the next step in the development of allergic therapy, just as it was necessary to bring the teachings of biochemistry to medicine before the utilization of insulin could be standardized. If this merger can be achieved, we shall leave the "machine age" of allergy and enter an era when the personality of the patient will always be considered in connection with the intensity of his allergic response. }

It is necessary to recognize that the development of the disciplines of applied immunology and of clinical psychology have, up to this time, run parallel, but almost independently, for the last half century. A closer correlation of the laws of both in the therapy of the allergic patient must inevitably be of value. How can this merger be achieved? It is quite clear that, generally speaking, neither the allergist nor the general practitioner can read with facility the specialized papers published in the journals of psychology and of psychiatry. It is just as evident that the psychiatrist would have similar difficulties in understanding the specialized essays of the allergist. This lack of communication between psychiatrists and allergists has led to controversy and retardation of progress.

The American College of Allergists recognized the existence of this problem and arranged a panel discussion of the subject at its third annual meeting, held in Atlantic City, New Jersey, June 8, 1947. By bringing together physicians interested in both the immunologic and the psychological aspects of the problem involved in treating the allergic patient, it was possible to take the first step mentioned in the foregoing: consideration of the co-ordination of the disciplines of applied immunology and of psychodynamics on the same program. It will appear in the following text that this step was new in the history of allergy as a medical specialty in this country. It required foresight and courage on the part of

the Board of Regents of the American College of Allergists to break the ground in this way. It was my privilege to introduce the subject at the meeting by the paper, "Psychodynamics and the Allergic Patient." The controversial nature of the problem required that it be approached with delicacy, but nevertheless with decision. For this reason, only the broad aspects of the question were discussed, rather than the minutiae of psychoanalytic psychology in a particular instance. While this treatment of the subject may not seem satisfactory to some psychiatrists and to some allergists, it did serve the purpose of bringing the importance of psychodynamics in the therapy of the allergic patient to the attention of the majority of the allergists in this country and, therefore, in the world.

I am deeply indebted for the orientation given me by Dr. Edward Weiss, and the direct assistance of Dr. M. Murray Peshkin, in discussing and editing the original manuscript, without which much of the value of the paper and, indeed, of the panel discussion, might have been lost. Dr. Harry Roger's remarks as chairman of the panel discussion catalyzed the flow of ideas. In addition, I wish to express my appreciation to the Board of Regents of the American College of Allergists for bringing the basic science of psychodynamics before the allergists of the country, in a simplified, but nevertheless acceptable, fashion. To Dorothy B. Mendes I am indebted for technical research, and to Mrs. Erna Teige for secretarial assistance. I hope that this first step in the coordination of organizational allergy and psychodynamics will lead to the ultimate recognition of the importance of emotional factors in the routine therapy of the allergic patient by both the allergist and the general practitioner.

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New York, N. Y.  
April, 1948



# Psychosomatic Aspects of Hay Fever and Asthma Prior to 1900

**E**VEN in their relatively primitive therapy, our medical ancestors not only seem to have recognized syndromes of hypersensitivity but also to have stressed a relationship between the psyche and allergic diseases. The same centers of controversy also persist today. Certain aspects of the development of psychiatric theory for these disorders up to the latter part of the last century will therefore be briefly outlined.

To begin with, Hippocrates<sup>1</sup> had an understanding of the role of both emotional and physical factors in disease. The former were classified as hysteria and hypochondria. "Fears, shame, pleasure, passion . . ." he says, "to each of these the appropriate member of the body responds by its actions. Instances are sweats, palpitations of the heart . . ."

Hippocrates further recognized, as did many of his followers, what we today call food allergy. This is illustrated in Figure 1 by a translation of a direct quotation.

## THE "ROSE FEVER SYNDROME" OF THE SEVENTEENTH CENTURY

The early history of pollen hay fever is complicated by the fact that the discussions on this subject found in the 17th and 18th Centuries cover at least two distinct clinical entities accidentally connected with the blooming of the rose. On the one hand, unusual and bizarre clinical reactions to the rose were described, where the patient was affected either by the sight or by the odor of roses. These peculiar reactions were general in nature, e.g.,

<sup>1</sup>This research has been aided in part by a grant from the Josiah Macy, Jr., Foundation, New York, and the Foundation for Research in Pulmonary Disease, New York.

fainting, and hardly connected explicitly with allergic rhinitis as we know it today. On the other hand, local nasal and ocular symptoms occurred during the time when the roses were in bloom. These symptoms were similar to hay fever as we know it today. They were not connected with the presence of roses, but usually with the time of their blooming

Let us quote some examples to be found in the writings of this time Binningerus<sup>2</sup> (1673), in an article entitled, "Fragrant Objects Which Purge the Body," states:

"L. B, a student of medicine, now a physician, has an extraordinarily constituted olfactory organ. Odors of objects of a pleasant or agreeable nature vanish in a short time, whereas very fetid odors remain with him for a long time so that they could not be made to disappear for many hours. An honorable lady the wife of an eminent personage . . . suffered from coryza at the time of the blooming of the roses . . ."

Binningerus' first patient, L. B., reacted to odors in a peculiar way. However, Binningerus classified L. B. and the "honorable lady who suffered from a coryza at the time of the blooming of the roses," in the same paragraph. But evidently these two syndromes are not connected, the first reaction being a disorder of olfaction, whereas the second is characteristically an allergic rhinitis.

Ledelius<sup>10</sup> (1683) points out that a merchant of "melancholic temperament" reacted to the smell of roses with a fairly typical syndrome of hay fever. However, the intense emotional attitude toward the odor of roses, apparently fairly common at that time, is brought out by Hunnerwolf<sup>9</sup> who, in 1686, went so far as to state:

"There are some to whom the odor of the rose is so harmful that at times it causes sickness and at other times it accelerates death. Examples of sudden death resulting from this cause are found here and there throughout the annals of medicine. It is remarkable that from this same cause headaches, toothaches, sneezing, smothering, fainting and eruptions of the blood are directly traceable. I know a man who suffered a severe

nasal catarrh as often as he entered a rose garden when it was in bloom, or whenever he smelled a rose bud."

Most interesting of all is the relationship of the symbolism of the rose to the symptoms produced by it. Valerianus<sup>17</sup> published in 1678 a pertinent passage

"There was a famous leader of soldiers who was so opposed to pleasures that he would swoon as soon as he perceived the fragrance of roses as though this were proof that valor, however manly, becomes enervated by allurements. This story is also handed down by Aristotle and gave occasion for a silly hieroglyphic. If an artist wished to depict stern Hannibal as being effeminate or as doubting, or yielding at Capua, he would give him a shield with the sign of a beetle and around the edge of the shield would entwine wreathes of roses. There are very many persons who cannot endure the exhalation of roses and among these are even rather great men. For when I was at Rome I saw Oliver Caraffa, a Cardinal of great celebrity, who was forced to withdraw every year at the time the roses were in bloom and to shut himself up within the gardens he had at the Quirinal. Guards were placed at the gates so that no one coming either to greet him or for the sake of friendship would bring a rose along. Among the Roman nobility there was Peter Melinus, remarkable for his ability, erudition and family position, who was greatly affected by the smell of roses."

It is obvious that the fainting attack produced by the fragrance of roses could not be caused solely by an immunologic reaction to an odor. The sight of and the fragrance of roses must have had, in addition, some other significance. The fact that roses were used to ornament the shield of a man who was considered to be effeminate or vacillating is a direct and still valid connection of the rose with effeminateness. It is most suggestive that the emotional reaction to the rose of some of the individuals under discussion at that period of time was connected with a symbolic representation of femininity, weakness and indecision. The fact that the Cardinal, referred to in the citation of Valerianus, was comfortable in his gardens with other flowers, provided that no roses were present, is indicative of the special significance of the rose—and it seems unlikely that this significance is only immunologic (if at all) in character. Unquestionably the answer

must be sought in the Cardinal's attitude toward the rose: symbol.\*

More clearly on an allergic basis is the observation by Rebeque<sup>6</sup> who stated in 1891:

"I have thought it useful to relate the effects which roses have on . . . From my thirteenth year at the rose-blooming time, each year, I am attacked by a running catarrh in which for many days a thin and sh. fluid flows from the nostrils, and the eyes are also affected so that te are caused to flow. This state lasts as long as the rose season. When the rose season is over this condition cures of itself. In the first ye I thought this was due not to roses but to the warm summer, I after more careful consideration of the affair I have found out that is due solely to the roses."

The general attitude toward roses in the period seems to have weighted this author's opinion so that he ascribed his symptom directly to roses, although he quite clearly connected his symptom to the blooming time of roses. His symptoms were, in all likelihood, those of pollen hay fever.

At the beginning of the 19th Century, then, there was a confused picture of the special effects of roses. This confusion began to clarify itself when Bostock reported in London a case of periodic infection of the eyes and chest and described his own symptoms as he had observed them over a period of thirty-eight years. In a second paper appearing in 1828, the term, "hay fever" appears. It had been associated by the public in general with new hay: Elliotson<sup>7</sup> was the first to emphasize in the medical literature that the pollen of flowers was responsible, although many people before him who had been interested in the syndrome also felt that the pollens were responsible. From this time on, the role which pollen and pollen allergens played in producing

\*It may be of interest to those who follow symbolism in psychoanalytic psychology, to connect further the act of giving someone "the rose" in the 17th Century with giving someone "the razz" in the 20th Century. It is well known, of course, that to give somebody the "razz" is to give him the "raspberry." The raspberry is closely related to the rose and, in fact, belongs to the same family. Is there any cultural process by which giving "the rose" in the 17th Century has led to giving the "razz" in the 20th Century? Although the matter may be one of coincidence, it is worthy of further exploration.

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aside

Wherefore it appears to me necessary to every physician to be skilled in nature, and strive to know, if he would wish to perform his duties, what man is in relation to the articles of food and drink, and to his other occupations, and what are the effects of each of them to every one. And it is not enough to know simply that cheese is a bad article of food, as disagreeing with whoever eats of it to satiety, but what sort of disturbance it creates, and wherefore, and with what principle in man it disagrees; for there are many other articles of food and drink naturally bad which affect man in a different manner. Thus, to illustrate my meaning by an example, undiluted wine drunk in large quantity renders a man ferile, and everybody seeing this knows that such is the power of wine, and the cause thereof; and we know, moreover, on what parts of a man's body it principally exerts its action; and I wish the same certainty to appear in other cases. For cheese (since we used it as an example) does not prove equally injurious to all men, for there are some who can take it to satiety without being hurt by it in the least, but, on the contrary, it is wonderful what strength it imparts to those it agrees with; but there are some who do not bear it well, their constitutions are different, and they differ in this respect, that what in their body is incompatible with cheese, is roused and put in commotion by such a thing, and those in whose bodies such a humor happens to prevail in greater quantity and

Fig. 1. Hippocrates, *Translations of the Aphorisms* Page 143 By Francis Adams London William Wood, 1836.

As for dry Athina's; They may proceed from a preternatural form of the Back and Breast, or from Stones and Schirruses in the Lungs: But the more Notable Cause is the Convulsions of the Organs of Respiration, especially the Diaphragm, occasion'd by the disorders of the lower Belly. 2. in Hysterie or Hypochondriac

Fig. 2. *The Practice of Physick* Page 153 By Michael Etmuller, London, 1679



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We are not taking up the possible other symbolisms of the flowering rose, aside from the fact that it definitely represented femininity. There are, of course, other connotations.

When fore it appears to me necessary to every physician to be skilled in nature, and strive to know, if he would wish to perform his duties, what man is in relation to the articles of food and drink, and to his other occupations, and what are the effects of each of them to every one. And it is not enough to know simply that cheese is a bad article of food, as disagreeing with whoever eats of it to satiety, but what sort of disturbance it creates, and wherefore, and with what principle in man it disagrees, for there are many other articles of food and drink naturally food which affect man in a different manner. Thus, to illustrate my meaning by an example, undiluted wine drunk in large quantity renders a man feeble; and everybody seeing this knows that such is the power of wine, and the cause thereof; and we know, moreover, on what parts of a man's body it principally exerts its action; and I wish the same certainty to appear in other cases. For cheese (since we used it as an example) does not prove equally injurious to all men, for there are some who can take it to satiety without being hurt by it in the least, but, on the contrary, it is wonderful what strength it imparts to those it agrees with; but there are some who do not bear it well, their constitutions are different, and they differ in this respect, that what in their body is incompatible with cheese, is roused and put in commotion by such a thing; and throw in some bodies such a humor happens to prevail in greater quantity and

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Fig. 2 *The Practice of Physick* Page 155 By Michael Etmuller, London, 1699

I will next describe the Effect of *Passions* in producing the Fit. A Fatal Orthopnoea is described by *Forestus* from a Fright.

The *Passion of Anger* makes the Spirits restless, and apt to produce the Fit ; and the Asthmatics observe in themselves great Restlessness of Spirits the Day preceding the Fit ; *Hippocrates's Aphorism* advises all Asthmatics to abstain from Anger and Shouting.

Fear, Sollicitude, and much Study, discomposes the Spirits, and produces a Restlessness in them, which may occasion a Fit ; the Asthmatics are commonly Hypochondriacal, which the frequent Fits produce, though that is supposed to depend on the other.

Sadness stops the Motion of Humours, and makes them more viscid. 'Tis observed, that all Asthmatics being angry or sad, do fall into Fits oftener than when they are chearful.

IT is sometimes difficult to distinguish it from the globus hystericus, and other complaints, comprehended under the general title of nervous disorders; but as the treatment in both is similar, a mistake of this kind will seldom be attended with any bad consequence. To recount the minute distinctions is unnecessary, as they may be inferred from the description of the disease: it must, however, be observed, that tho' respiration is often affected by nervous complaints, yet in these, the spasms are not so violent, nor the breathing so laborious.

IN fact, the violence of the symptoms during the paroxysm, and the almost total absence of them in the remission, together with their irregular succession to each other, are the principal diagnostic signs of the disease.



seasonal hay fever is quite clear. Not so clear, however, is the type of paroxysmal sneezing and hay fever-like symptoms which were also observed in the absence of pollen. The significance of roses rapidly diminished. Thus, in a questionnaire which was sent out by George M. Beard,<sup>1</sup> a New York neurologist, in 1879, we find among 500 replies only five who believed that roses caused the paroxysms. Anxiety, on the other hand, was chosen in sixteen of the 500.

Dust (in-door and out-door).....	104
Hay (dried or fresh).....	48
Over-exertion .....	38
Gaslight ..	36
Flowers .....	31
Roses ..	5
.....	4
.....	3
.....	2
.....	27
Chills ..	25
Anxiety .....	16

In other words, in the late 19th Century there were three times as many who believed, as far as this questionnaire is concerned, that anxiety rather than roses was the cause of the hay fever-like symptoms. Beard laid particular stress on the following facts: (1) that the temperament of hay fever patients was predominantly nervous, (2) that nervous symptoms, that is, sick headaches, backaches, frequently skin diseases, et cetera, were often present in hay fever. He states:

"Headaches of nearly all kinds, backaches, neuralgia, sleeplessness, and it is now beginning to be recognized, certain skin diseases such as prurigo and, in the opinion of some, certain varieties of eczema, are largely nervous affections. That is, the nervous element predominates in them." He concludes, "Hay fever is essentially a neurosis—that is, a functional disease of the nervous system."

Emphasis on the neurotic element in hay fever appears in *Hay Fever and Paroxysmal Sneezing*, by Morrell Mackenzie,<sup>11</sup> which was published in 1887. Among his numerous references which show surprising insight is the following:

"It has long been noticed that attacks of prolonged sneezing are most apt to occur in persons of nervous temperament. . . . It is also well

known that in states of great emotional sensibility sneezing is apt to occur.

"That sneezing often depends on the morbid excitability of a centre is shown by the fact that a person who is subject to such paroxysms will often remain for many hours free from an attack when his mind is occupied, whilst when unemployed the attacks may be frequent.

"There are certain supposed fallacies in the pollen theory which must be referred to. Thus, a case is mentioned by Dr. Walshe, in which a patient retained the symptoms of hay fever during a passage across the Atlantic, and another has been reported by Dr. Abbott Smith in which the disease came on at a distance of nine miles from land"

However, these examples are not unequivocal since allergens of many kinds exist on board ship.

"The phenomena of hay asthma, though their origin may be different, are, like those of asthma, in general of a neurotic type and it would appear that in some cases hay fever has been of what Dr. Carpenter calls an *ideo-motor* character."

Dr. Mackenzie describes the case of a "young lady who suffered so acutely from hay fever that she always remained in London till after the hay was got in. On one occasion, however, after a visit to the Royal Academy, where she had been much struck by a highly realistic painting of a hay field by Mr. Vicat Cole, she had a severe attack of her familiar complaint."

The present state of paroxysmal attacks of sneezing, nasal obstruction, rhinorrhea, usually of short duration, if not accompanied by any of the symptoms usually found when an infection is present, and not confined to any particular season, is considered by some to be allergic. However, the large variety of names which this type of vasomotor rhinitis has had applied to it is of significance and illustrates how ill-defined this syndrome is:\*

1. Vasomotor rhinitis
2. Perennial non-seasonal rhinitis
3. *Perennial non-seasonal allergic rhinitis*
4. Paroxysmal rhinitis
5. Nervous rhinitis
6. Hyperesthetic rhinitis
7. *Intrinsic rhinitis*
8. Allergic coryza
9. Spasmodic coryza
10. Paroxysmal rhinorrhea
11. Perennial hay fever
12. *Hydrox nasalis*
13. Allergic rhinopathy

We have, indeed, a difficult subject to deal with. In view of its history and its modern clinical and laboratory implication, it appears very likely that a large fraction of these cases have an emotional content, the psychodynamics of which still remain to be explored.

#### ASTHMA

Both Hippocrates and Aretaeus mention asthmatic symptoms. Hippocrates recognized that *anger* and *hostility* influenced the asthmatic paroxysm. In the 7th Century, Aeginita stated that, "*Those who breathe thick without fever, like those who run fast, are said to be arthmatic; that is, to pant for breath, and for being obliged to keep the chest erect for fear of being suffocated. They are called orthopneics.*"

The concept of nervous or spasmodic asthma characterized by attacks of paroxysmal panting without infection, as described above, was recognized by J. B. Van Helmont<sup>18</sup> (1577-1644), who pointed out and emphasized the spasmodic element in asthma in its sudden onset and the way in which it occurred in attacks like epilepsy.

Up to the 17th Century the opinions of Galen and other Greek physicians were quoted and had remained essentially unchanged for more than a thousand years. At this time, however, numerous publications appeared giving detailed descriptions of the symptoms, causes and cures for asthma, dyspnea, "the fits," amongst other names for this syndrome. Among these physicians there were a few who sensed that in some cases of spasmodic asthma the initiation of the attacks and their subsequent relief *could not be simply traced to any known physical or organic cause.*

Thomas Willis<sup>19</sup> was an early pioneer who expressed the idea that asthmatic attacks might be attributed to emotional disturbance. In 1684 he states in his book, *On an Asthma* that " . . .

irregular motions, enter inordinately into the fibres, as well as nerves, as moving of the organs of breathing."



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known that in states of great emotional sensibility sneezing is apt to occur.

"That sneezing often depends on the morbid excitability of a centre is shown by the fact that a person who is subject to such paroxysms will often remain for many hours free from an attack when his mind is occupied, whilst when unemployed the attacks may be frequent.

"There are certain supposed fallacies in the pollen theory which must be referred to. Thus, a case is mentioned by Dr. Walshe, in which a patient retained the symptoms of hay fever during a passage across the Atlantic, and another has been reported by Dr. Abbott Smith in which the disease came on at a distance of nine miles from land."

However, these examples are not unequivocal since allergens of many kinds exist on board ship.

"The phenomena of hay asthma, though their origin may be different, are, like those of asthma, in general of a neurotic type and it would appear that in some cases hay fever has been of what Dr. Carpenter calls an ideo-motor character."

Dr. Mackenzie describes the case of a "young lady who suffered so acutely from hay fever that she always remained in London till after the hay was got in. On one occasion, however, after a visit to the Royal Academy, where she had been much struck by a highly realistic painting of a hay field by Mr. Vicat Cole, she had a severe attack of her familiar complaint."

The present state of paroxysmal attacks of sneezing, nasal obstruction, rhinorrhea, usually of short duration, if not accompanied by any of the symptoms usually found when an infection is present, and not confined to any particular season, is considered by some to be allergic. However, the large variety of names which this type of vasomotor rhinitis has had applied to it is of significance and illustrates how ill-defined this syndrome is:<sup>14</sup>

1. Vasomotor rhinitis
2. Perennial non-seasonal rhinitis
3. Perennial non-seasonal allergic rhinitis
4. Paroxysmal rhinitis
5. Nervous rhinitis
6. Hyperesthetic rhinitis
7. Intrinsic rhinitis
8. Allergic coryza
9. Spasmodic coryza
10. Paroxysmal rhinorrhea
11. Perennial hay fever
12. Hydroa nasalis
13. Allergic rhinopathy

"It is observed that all asthmatics being angry or sad, do fall into fits oftener than when they are cheerful."

That asthma might be caused by "nervous disorders" then received increased consideration by physicians. For example, in 1768, John Millar,<sup>12</sup> in his *Observations on the Asthma and the Hooping Cough*, writes of asthma (Fig. 4): "It is sometimes difficult to distinguish from the *globus hystericus* and other complaints comprehended under the general title of nervous disorders."

There were, nevertheless, as now, dissenting voices. In *Observations on the History and Cure of the Asthma*, published in 1793, Michael Ryan<sup>13</sup> says, in defense of his theory that cold is the main cause of asthma, "... Dr. Willis ... who made so material a change in the pathology of asthma and considered it in every respect a nervous disease, gives us notwithstanding a case of convulsive asthma that evidently arose from cold."

*A Practical Inquiry into Disordered Respiration*, written by Robert Bree<sup>3</sup> in 1800, confirms and expands Dr. Floyer's concepts (Fig. 5)

"The disposition which predisposes to asthma is the choleric. . . . Persons of this temperament are more subject to accumulations of blood in the pulmonary vessels and to be affected by sudden impulses of passion and emotion of the mind, which readily occasion an impetus in the circulation overpowering the contractile tone of the exhalants. . . . The passions of the mind may excite a paroxysm or strengthen the predisposition to it. Love, grief, terror appear to distress the mind and relax the habit, they may not in this view so frequently excite the paroxysm as they may add to the predisposition to it."

"Every sensation of the body raises a perception or idea of the mind which being recalled by the memory or imagination brings back the sensation combined with it if a complex idea be recalled complicated sensations may be revived."

The foregoing paragraph foreshadows the accepted significance of the part played by repression and conflict in enhancing the intensity of physical symptoms.

In 1860 in *Asthma Its Pathology and Treatment*, by Henry Hyde Salter,<sup>14</sup> a more modern phraseology appears. "What I shall endeavor to show is this: that asthma is essentially, and with

In his *Practice of Physick*, published in 1685, Dr. Willis further states, "As to the other intent of curing in fits of the asthma, the organs of respiration being reclaimed from the *convulsions* they are fallen into, return *calmly* to their ordinary functions. We must use anticonvulsive and anodine remedies; for medicines wont to be given in hysteric passions are also proper in convulsive asthma."

We find in *A Practice of Physick* (1699) that Michael Etmüller<sup>6</sup> gives "sudden fear" as one of the causes of asthma, and he prescribes as cures, ". . . appeasing the spirits, strengthening the nerves" (Fig. 2).

Of even greater interest is the case history given in Sir John Floyer's<sup>7</sup> *A Treatise of the Asthma*, written in 1726, in which he makes direct connection between an asthmatic attack induced by an infection and the pathologic residue now considered bacterial allergy intensified by a superimposed emotional disturbance.

"If I may give some rationale on this lady's asthma, I believe the intermitting fever laid the foundation of it; and the reliques of that by the trouble mentioned was turned into the nerves and gave her hysteric fits, and those being disturbed by the smoak of tobacco which is yet extremely offensive to her if she smell it, or else, the disposition of her father laid the foundation of an hysteric asthma which at present receives no relief by steel or hysteric medicines . . ."

This certainly foreshadows the psychosomatic point of view! Further quoting Dr. Floyer (Fig. 3):

"I will next describe the effect of passions in producing the fit. . . . The passion of anger makes the spirits restless and apt to produce the fit; and the asthmatics observe in themselves great restlessness of spirits the day preceding the fit; Hippocrates' Aphorism advises all asthmatics to abstain from anger and shouting.

"Fear, solicitude and much study, discomforts the spirits and produces a restlessness in them which may occasion a fit.

"Study inflames the spirits and too much rarefies them; and all violent emotions of the spirits quicken the pulse and thereby produce the asthma and ephemera.

"Sadness stops the motion of humours and makes them more viscid

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psychoanalytic psychology, represent historic fields of progress in medicine which at present must be studied separately and then synthesized by the clinician in theory and in practice.

#### SUMMARY

The early history of pollen hay fever discloses that in the 17th and 18th Centuries two distinct clinical syndromes were connected with the blooming of the rose. One of these is characterized by a profound general reaction of the patient accompanied by constitutional symptoms, like fainting, and is unconnected with allergic rhinitis as we know it today. The other is characterized by local nasal and ocular symptoms occurring at the time when the roses were in bloom. These symptoms were similar to hay fever as we know it today. Whereas, the first general type of reaction was connected with the presence of roses, the second hay fever type was not connected with the presence of roses but usually with the time of their blooming.

By the middle of the 19th Century the view that roses were of significance in the production of hay fever became less common, whereas dust, hay, smoke, chills and anxieties became more important. Although the term "rose fever" is used today, the general reactions ascribed to the rose have essentially vanished from the medical literature.

The relationship of the early symbolic significance of the rose with indecisiveness, effeminacy and ineffectuality is discussed in connection with the "rose fever" syndrome.

The early recognition that anger and hostility influence the asthmatic paroxysm goes back at least to the time of Hippocrates. This concept persisted through the Middle Ages without correlation with known physical causes. Emotional aspects were still emphasized in the 18th Century. The relationship to infection and pathologic residues was pointed out, and the notion of superimposed emotional disturbances was introduced. By the beginning of the 19th Century, the notion of repressed emotions entered into the discussion of the causation of asthma. However, these early observations were soon brought into line with the immuno-



perhaps the exception of a single class of cases, exclusively a nervous disease; that the nervous system is the seat of essential pathological condition." Dr. Salter lists the following as causes of asthma, proving, he states, that it is of nervous origin: fatigue, physical exhaustion, sudden or violent emotion, venereal excitement. He recommends antispasmodics, sedatives and direct nervous depressants as remedies to asthmatic attacks, and, as further proof of neurotic involvement cites the case of a man who was suffering from an acute attack of asthma, but was cured of it immediately when the need arose to administer to his sister who had an accident.

In 1879, recognition of nervous tension as a factor in bringing on asthmatic attacks is revealed in a case history presented by John C. Thorowgood<sup>16</sup> in *The Lettsonian Lectures on Bronchial Asthma*. Here he describes how an asthmatic attack was obviously brought on by anxiety and immediately cured when the anxiety was removed.

"My own observation," says Dr. Thorowgood, "has shown me that a most severe fit of bronchial asthma . . . may develop in the space of two minutes."

". . . A youth going up for examinations is breathing with comfort when the anxiety due to the non-arrival of the carriage . . . causes a speedy attack of asthma, which subsides as the carriage draws up to the door."

The reader may wonder why the influence of Freud and his explorations into the unconscious, and the way in which new techniques of pure science, and by the systematic explorations of Freud into the unconscious.

The reader may wonder why the influence of Freud and his explorations into the unconscious, and the way in which new laboratory techniques have influenced allergic reactions, are not also introduced at this time. It would be difficult, even in an outline, to describe the extraordinary and stimulating researches of the last five decades. References to these are given in the paper, "Psychodynamics and the Allergic Patient." Each of these topics, the rise of modern immunology and the rise of modern

## Psychodynamics and the Allergic Patient

IT has been known from ancient times that attacks of asthma could be precipitated by situations engendering anger and other emotional responses. Similarly, hay fever and certain dermatological conditions were recognized as being markedly affected by and perhaps even initiated by psychological forces. However,

leading to a new immunology based upon physical and chemical principles. Incidental to this development of physicochemical influence, the role of emotional factors in the allergies was forced into the background to the extent that until the last few years none of the standard American books on allergy seriously considered these factors in a systematic way.

### PRESENT RELATIONSHIP OF ALLERGY TO PSYCHOSOMATIC MEDICINE

Let us examine two medical journals, one devoted to psychosomatic medicine and the other devoted to allergy in the period from 1939 to 1946. During this period in the journal, *Psychosomatic Medicine*, there were published twenty papers relating specifically to emotional problems in the allergic state.<sup>10</sup> In the only American journal devoted to clinical allergy, published during the same period, there was only one brief report on the same topic. Surely this lack of communication between those interested in the solution of medical problems by psychosomatic techniques and those resting mainly on immunologic techniques

<sup>10</sup> This research has been aided in part by grants from the Josiah Macy, Jr., Foundation, New York City, and the Foundation for Research in Pulmonary Disease, New York.

logic information accumulating in connection with pollen studies on hay fever. On the one hand, the rise of modern immunology, and on the other hand, the acceptance of psychoanalytic psychology, led to the more modern points of view which have developed primarily in the last one-half century. These two fields now remain to be synthesized by the clinician in theory and in therapy.

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- 2 Cell antigens.
- 3 The nature and the specificity of antibodies.
- 4 The mechanism of sensitization by artificially conjugated antigens.
5. The mechanism of serologic reactions to simple chemical compounds
6. Chemical investigation of nonprotein substances reacting specifically.
7. The mechanisms of antigen-antibody reactions in general.

In this attempt to relate chemistry and physics to immunology and to allergy, the experimenter, therefore, was, in the first place, always confronted with two questions: (1) What molecules are involved? (2) How do these molecules react as allergens to produce sensitizing antibodies which react specifically?

#### THE EXTENSION OF THE IMMUNOLOGIC MODEL TO A UNITARIAN THEORY: THE HISTAMINE THEORY AND ITS MANIFEST INADEQUACY

There was thus built up in the last half century a great field of physics and chemistry applied to immunology and allergy. These applications of the study of small and large molecules to clinical sensitization in man provided us with an extraordinarily useful technique in studying and treating the many clinical entities comprising the subject of allergy. The importance of this immunologic model for most of the clinical manifestations of allergy cannot be overestimated. Indeed, it has created the specialty of allergy. The drive for simplification by means of simple models led directly to a unitarian mechanism designed to account for all of the allergic patterns. The current histamine theory of allergy \* There is no doubt that histamine, which is a low molecular weight imidazole, does reproduce, to a certain extent, some of the mani-

\*There have been many reviews purporting to show the importance of histamine in the production of clinical syndromes of allergy and in the production of anaphylaxis. However, all of these reviews, with few exceptions, are biased in favor of the theory, and evidence contrary to the theory is deliberately omitted. An exception is to be found in the excellent discussion made by Ratner in his book, *Allergy, Anaphylaxis and Immunotherapy* (Williams and Wilkins Co., 1943). In addition, the reader should consult Abramson, H. A. "Present Status of Allergy," *The Nervous Child*, 7: 85, 1948, where the evidence contrary to the histamine theory is also presented in an integrated form.

is not desirable. In all fairness, not only have the allergists largely neglected certain important aspects of psychosomatic medicine, but the psychiatrists also, too often, are apt to neglect the massive structure of immunologic data which I have just touched upon. Why hasn't better rapport between the immunologic and psychologic techniques in medical practice been satisfactorily established?

#### THE A PRIORI FAILURE OF THE MODEL IN CLINICAL PRACTICE

For someone who has mainly published data on physicochemical mechanisms connected with immunologic processes in allergy to venture to give a paper on, "Psychodynamics and the Allergic Patient," might first be construed as a startling shift from a well-defined path of basic research. However, this is an assumption which frequently did not harmonize with my experience in the clinical practice of allergy during the last decade. This exploration of the utilization of psychodynamics in the practice of allergy is planned to determine through discussion what the allergist may expect in therapy from recent developments in the basic science of psychodynamics.<sup>11</sup> No matter how deeply our research in the fields of physics and chemistry takes us in attempts to provide models which explain the nature of immunologic and allergic processes, none of the models can ever *a priori* fully satisfy the physician in his daily therapeutic procedures, because none of these models ever completely reflects the complex pattern of the allergic individual.

The evolution of allergy as a clinical specialty depended upon progress and success in the correlation of anaphylactic data obtained from animals and man, with what was simultaneously discovered in the physics and chemistry of immunologic reactions.<sup>3</sup> New concepts, therefore, developed through proper observations of clinical manifestations of the tissue responses of man and animals, correlated with experiments like those of Obermayer and Pick, of Landsteiner<sup>7</sup> and his school, and of many others on the following:

1. The serologic specificity of proteins.

2. Cell antigens.
3. The nature and the specificity of antibodies
4. The mechanism of sensitization by artificially conjugated antigens
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festations connected with allergic reactions. Thus the wheal produced by histamine and the wheal produced by an allergen-antibody reaction are very similar. However, all skin reactions and even all wheals connected with the allergic state are not similar to those produced by histamine. Nor can the whealing responses to physical agents like light and cold be explained without eliminating the basic feature of the histamine theory: the rapid diffusibility of the histamine molecule. Indeed, I could use the entire space allotted to me describing how this histamine model, often used to explain conveniently almost every clinical and experimental entity of allergy, has been unjustifiably utilized.

What is the difficulty which prevents those who utilize physico-chemical models from incorporating into their thinking and clinical utilization the rapidly growing science of psychodynamics? Is this desire to utilize models a characteristic of the growth of science in general, or is it something limited to the evolution of medical practice? I shall demonstrate that the use of models is a part of the development of science.

#### KELVINISM · FAILURE OF THE MODEL IN PHYSICS TO ACCOUNT FOR ALL PHYSICAL PHENOMENA

In 1932 the state of physics was in some ways analagous to the relationship of allergy with psychodynamics. The new experimental facts of relativity and quantum phenomena met with what can be termed an explanatory crisis.<sup>2</sup> Old ideas of mechanics and electrodynamics failed to explain the behavior of matter and of energy. The models which had been built up and had been utilized for many years were inadequate to account for the experimental facts of relativity and of radiation. Bridgman at that time pointed out that this crisis which confronted the physicist was only a repetition of what had occurred many times in the past. He mentions that similar crises confronted Prometheus when he discovered fire, and the first man who observed a straw sticking to a piece of rubbed amber or a suspended stone seeking the north star. Every kitten is confronted with such a crisis at the end of nine days. Whenever experience takes us into new or

unfamiliar realms a new crisis of some type must develop To quote Bridgman: "Now what are we to do in such a crisis? It seems to me that the only sensible course is to do exactly what the kitten does; namely, to wait until we have amassed so much experience of the new kind that it is perfectly familiar to us and then to resume the process of explanation with elements from our new experience included in our list of axioms." Even though physical models are the favorite of the physicists, the temporary and ultimately inadequate character of attempted physical explanations based upon models alone is brought out by the successes as well as the failures of Lord Kelvin to find a mechanical explanation for all physical phenomena To quote from Lord Kelvin: "I never satisfy myself until I can make a mechanical model of a thing If I can make a mechanical model, I can understand it. As long as I cannot make a mechanical model all the way through, I cannot understand it. But I want to understand light as well as I can, without introducing things that we understand even less of."

#### ANALOGY OF PROGRESS IN CLINICAL ALLERGY WITH PROGRESS IN PHYSICS

Just as the physicist was confronted with inexplicable facts about a score of years ago, so the allergist today frequently is confronted with phenomena not completely explained by the immunologic model which forms the basis of his specialty. In other words, one might say that in the study of certain cases classified as allergic, an explanatory crisis exists in the specialty of allergy similar to that which occurred in the much simpler science of physics in the 1930's. This situation in physics ultimately led the physicist to incorporate into his thinking new theories having to do with relativity and radiation phenomena New theories and new mechanisms do not ever clarify all of the unsolved problems. However, when the allergist consciously incorporates into his thinking the science of psychodynamics, even greater progress in the use of the immunologic model may be expected, because the incorporation of new ideas in science seems to stimulate further developments along classical lines. I shall attempt



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of free surface energy or changes in the physical state of the surfaces, induced by the rubbing or the stretching of rubber, may give rise to electrical potentials. Can we not consider that various integrated neurobiochemical mechanisms, such as frustration, anxiety, guilt, hostility, et cetera, may give rise to psychomotive forces, the clinical effects of which will become more clearly delineated as the accumulating data are classified systematically?

It is recognized that Freud used the expressions motive force and motive power. However, a motive force is merely one which gives motion. It is not sufficiently specifically defined. It is necessary to designate the motive forces under discussion as those derived from the psyche, that is, specifically *psychomotive* forces. We must, therefore, also recognize the existence of *neuromotive* forces like those, to take a simple example, engendered by the antidromal impulses which produce a flare in the skin surrounding the histamine or allergic wheal.

With these definitions in mind, a fraction of my case histories, which proved to me that the conscious use of psychodynamics will be of value to the allergist, will be briefly touched upon.

#### CASE RECORDS ON PATIENTS IN WHOM THE DIAGNOSIS OF ALLERGY IS DEFINITE

*Case 1.*—C. was an unmarried man of forty years who was receiving perennial pollen therapy. Upon giving him his usual dose on one occasion and using the same extract, he got a very severe local reaction. I was unable to explain this reaction when he stated, "I am under unusually intense emotional strain at present. Do you think that this could have influenced the reaction? I believe so!" Whether emotional stress will increase the severity of local and general reactions to pollen allergens during treatment, I should like to leave to the Panel for discussion.

*Case 2.*—J. B., a theological student, stated, "When I have hay fever during September, something quite interesting occurs. I may have hay fever prior to preaching, but the hay fever disappears when I reach the pulpit."

*Case 3.*—A similar sequence occurred in an actress, K., who was sensitive to pollens and dust. K. stated that while she very frequently, during the season, had very severe hay fever in the wings of the stage, the hay fever disappeared when she faced the audience.

case records to illustrate how the immunologic or the classical model does not always completely account for the clinical syndromes in two groups of patients: (1) patients in whom allergy (immunologic basis) is present; (2) patients in whom the immunologic model cannot be demonstrated unequivocally in the light of present knowledge. Before presenting these case histories, let us define psychodynamics in more explicit terms.

#### PSYCHODYNAMICS AND PSYCHOMOTIVE FORCES

As you know, statics treats of the action of forces on bodies, the forces being arranged so that the bodies are at rest. The science which treats the action of forces on bodies in motion is called dynamics. It is convenient to say that the science which treats the action of psychological forces on behavior may properly be called the science of psychodynamics. The word behavior, as used here, includes the unit manifestations of the clinical syndromes of the allergies, such as the type of respiration, the response to skin stimuli, reactions of the patient to sensitizing antigens, or patterns analogous to those just indicated.

Rado<sup>11</sup> states, "Psychodynamics is the name for the theory which brings order into psychoanalytic observation and into the material of data ascertained by such observation. Psychodynamics represents the organized body of psychoanalytic findings, complemented by results obtained through other methods of research. Because of its singular value for the understanding of human behavior, psychodynamics must take its place in medicine as a basic science."

If possible, the foregoing definitions should be consciously incorporated into our clinical attitudes. The physiologist speaks of psychomotor reactions. Should we not, then, consider these psychodynamic factors as giving rise to psychomotive forces? I wonder if the term psychomotive force does not have some justification! There is an analogy with the term *electromotive force*. Electromotive forces may be engendered by various qualitatively different phenomena. Thus, if two dissimilar metals are placed in a dilute acid an electromotive force arises. Similarly, changes



Fig 1 Compare the sharp edge of the typical whealing response to light with the irregular edge of the wheal produced by histamine (electrophoresis). This is evidence that the light reaction is not caused by a small molecule like histamine.

One may speculate in various ways on the mechanisms leading to the sudden diminution of the symptoms of hay fever in these apparently simple situations. It is, however, of still greater interest to take up in more detail the next case.

*Case 4*—J. S., an unmarried man, twenty-five years old, was first seen in 1935. At that time he was extremely clinically sensitive to pollens and other inhalants. He also was skin sensitive to many foods. Trained as an engineer, he found it difficult at that time to obtain professional employment because of the business depression. He was extremely radical in his political views and did not take kindly to our form of government. He responded poorly to specific therapy by injections of pollens and dust and by elimination diets. However, he himself developed a technique of controlling his asthma by a very interesting and surprising procedure. He stated, "When I feel an attack of asthma coming on, I get furious with myself for having the asthma, and this seems to avert the attack."

According to the results of certain studies on the psychogenic factors in asthma, it appears that the suppression of hostility may lead to intensification of asthma. In this patient there is evidence that some similar mechanism may have intensified his symptoms. The patient was advised to reconsider his hostile attitude toward our present social system and, if possible, to fit in with it. After several interviews he decided to become a government employe. He was sent to Albany, N. Y., by the government, where because of his skill he was rapidly promoted. He shortly thereafter made a satisfactory marriage, with a very definite change in attitude toward his whole life situation, modifying in addition his political views. His letters indicated that he was practically free of asthma but that he had mild residual hay fever which was readily controlled by pollen therapy.

*Case 5*—Another instance in which repressed hostility led to a serious asthma attack was in Mrs. Q. From 1936 to 1940, when she was unmarried, she had received pollen and dust therapy with satisfactory results. However, subsequent to her marriage there occurred serious asthmatic attacks, which at first were ascribed to food sensitivity. On Friday nights she visited her mother-in-law. At these dinners the patient usually partook of fish in various forms. And since skin reactivity to fish was moderately positive, there did not seem to be much doubt that her asthma was induced by injudicious ingestion of what to her was an allergenic food. Unfortunately, the problem was not solved that simply. A serious asthmatic attack started one Saturday morning at 2:00 a. m. and persisted for four days unabated. The patient at that time was in her fourth month of pregnancy. After prolonged discussion, in which the patient's relationship with various members of the family who were present for dinner the preceding Friday evening was discussed, the patient became very upset

and started to stammer in describing a conversation with her sister-in-law. It seems that her sister-in-law had remarked that the patient's abdomen was too large for a pregnancy in the fourth month. The violence of the attitude of the patient toward her sister-in-law, as well as the stammering, indicated that the relationship with the sister-in-law was strained. This expression of hostility to her sister-in-law coincided with the very rapid disappearance of her severe asthmatic condition. Except for the usual occasional mild wheezing spells readily controlled by inhalation of epinephrine hydrochloride, a quiet period of several months followed, during which her Friday evening asthma ceased.

This patient's skin reactions fit quite clearly and classically into the immunologic model. The patient had already been married for some time, and there was no reason to believe that premarital relations had caused the pregnancy. The hostility toward the sister-in-law and the violence of her response to the remark that her abdomen was large must be based upon other experience or fantasy. It was apparently these unknown experiences or fantasies, unknown both to the patient and the doctor, superimposed on the immunologic pattern, which led to the aggravation of asthma.

*Case 6*—This patient, a married woman, thirty-two years old, had two children and appeared happily married. However, one year before she was first seen by me, mild asthmatic attacks which had previously been easily controlled became so severe that the patient became incapacitated and could no longer take care of her family duties. She had had asthmatic attacks of a mild nature during the preceding ten years, particularly associated with upper respiratory infection. There was no history of seasonal hay fever nor clinical intolerance to other allergens. The patient had travelled a considerable distance to see me and arrived in New York City in a somewhat anxious state. In her first interview she revealed that during the preceding year no one had really been able to help her and that I was a last resort. At that time my attention was focused on experimental work with mists, which resulted in the stabilization of the particle size of the 1:100 solution of epinephrine hydrochloride. This new epinephrine mixture was prescribed. Much to my regret, the nebulizer and the solution which I had highly recommended were ineffective. I then advised her to take a teaspoonful of a mixture containing 5 grains of chloral hydrate three to four times a day and to discontinue the epinephrine injections and ephedrine capsules upon which she had previously depended. After this recommendation she came to see me the next day, sat down, pulled the bottle of chloral hydrate out of her bag, took a drink from the bottle and said, "You struck oil."

In spite of such optimism, the patient phoned several days later that her asthma was more severe than ever. I saw the patient within one hour of



Fig 2 Whealing response to cold produced by a standard stimulus Note the absence of pseudopods Magnification X 3

respiratory pattern not typical of asthma. In typical asthma, as we know, there is difficulty in expiration. However, it is always wise to ascertain if there is not a superimposed difficulty in inspiration. When there is inspiratory as well as expiratory difficulty, I have found it practical not to rely entirely upon epinephrine either by inhalation or by injection.

In cases where the inspiratory difficulty appears to be greater, sedation may be more important in controlling the attack.

In certain instances epinephrine may not work at all and these patients are often considered to be "adrenalin fast." However, these people are far from "adrenalin fast" in a pharmacologic sense for they may not have been taking epinephrine for months. An acute asthmatic paroxysm may occur which does not respond at all to epinephrine, irrespective of the amount given. I have one patient who received 6 cubic centimeters of epinephrine, 1:1,000 solution, subcutaneously, during the course of one night without relief, but who responded quickly to moderate sedation. Another case in point is one that I have observed recently.

*Case 8*—This patient was a married woman of thirty years of age who had moderately severe asthma for one week which did not respond to epinephrine or ephedrine. She was hospitalized, and 3 grains of sodium amylal were administered after meals, three times a day, with 15 grains of seconal and 10 grains of chloral hydrate before retiring. In spite of this profound sedation, with a minimum amount of epinephrine given by inhalation, this patient was alert, active and became asthma-free. During this time, in spite of the high degree of sedation, she showed none of the ordinary sedative effects except the beneficial effect on her respiratory difficulty. As a matter of fact, this patient has periods free of asthma at home, followed by periods of severe asthma which is essentially uncontrolled by epinephrine but definitely controlled by sedation. Now this patient is really allergic, with positive skin tests, and she gets asthma when exposed to various inhalants including cat and horse dander. However, under exceptionally controlled conditions in which the allergic factors remained relatively constant, the severe degree of her asthma, I believe, depended to a great extent upon her emotional status. The complete data of this case illustrates a good example in which the superimposed psychodynamic factor must be controlled much more than the allergic component.

*Case 9*—A schoolgirl of thirteen years of age had had periodic attacks of afebrile stuffed nose and sore throat. This began at the age of five when



hospitalization. She received me sitting up in bed and breathing with difficulty. However, on examination of the chest, no râles were heard and the breath sounds were exaggerated. These findings were confirmed by a consultant. The patient's difficulty was evidently both *respiratory* and *asthmatic*.

After several hours, the patient developed a severe status asthmaticus. If there had been more delay in the chest examination, the respiratory difficulty without asthma would not have been observed. Subsequent conversation with the patient led to the disclosure that there was a very unhappy and difficult marital situation, details of which need not concern us at this time. In addition to the usual symptomatic therapy of her asthma, psychoanalysis was advised, and later was undertaken by the patient.

*Case 7—C.*, a twenty-four-year-old, serious minded, unmarried woman, lived with parents who had set up rather high standards for her. An ailing father, who was unable to work, made it necessary for her to continue working in order to contribute to the family support. Clinically *sensitive to pollen, dust and a variety of foods*, she was unequivocally classified as an allergic individual. At times she had difficulty in controlling her seasonal asthma as well as the asthma attacks which occurred between seasons. Very often she lost her usual response to ephedrine and epinephrine. For this reason it was necessary to explore at length, but nevertheless superficially, her life situation. This was not successful.

I finally decided that I would try to control her asthma by teaching her a form of breathing exercise, in itself a very definite type of psychotherapy. In it, the patient is instructed to extend the hands forward while inhaling, on exhalation the hands are brought to the side, but during expiration the expiratory breath is made very slowly and a humming, crying sound is made through the closed lips. It is very interesting to see the reaction of patients when the exercise is demonstrated. The crying sound, of course, has many implications, and nine patients out of ten smile in a queer and embarrassed sort of way. However, the patient took readily to this type of exercise and reported her ability to avert attacks by doing the breathing exercises when she felt an attack coming on. Patients are advised to perform this exercise from one to two minutes every hour on the hour during a period of tension and difficulty in controlling the wheezing in the chest. This patient improved considerably on utilizing this breathing exercise. As a matter of fact, she was able to use this exercise in the subways when she felt heaviness in the chest, by thinking of the movements and of the crying expiratory whimper which she had been instructed to carry out.

One of the most interesting groups of allergic individuals that may be encountered is the group with bronchial asthma, with the

The clinical course of the patient has been excellent without specific hypsensatization except for dust.

#### ALLERGIC PATTERNS IN INDIVIDUALS NOT PROVEN TO BE IMMUNOLOGICALLY ALLERGIC

In practically all of the cases with bilateral, wheezing respiratory difficulties (excluding tumors, stenoses, et cetera) which I have seen, there was some plausible type of immunologic, allergic or infectious basis. However, in the dermatoses, not infrequently there occur clinical entities similar to allergic responses where a true immunologic reaction cannot be unequivocally demonstrated. For example, a young married woman who was seen in 1940 complained of hives following ingestion of aspirin. Investigation revealed that she could take aspirin with no hives developing while under observation in my office, but on taking aspirin at home she invariably got hives. She had never had hives before her marriage. After her marriage she had almost always taken aspirin after quarreling with her husband. It ultimately became clear that it was not the aspirin but life situations of this type which led to hives.

In a study of several persons with hypersensitiveness (whealing response) to cold who were not immunologically allergic, a conflict situation was found in one case in an incident when the patient nearly drowned while swimming in the summer of 1941. A study revealed that these hives were apparently engendered by an unconscious death wish, the conscious realization of which led to a fairly rapid recovery. This case is of special interest and is given here in some detail.

*Case 10*—A married woman, thirty-one years old, whose illness began on July 20, 1940, when she went swimming. On coming out of the water and drying herself as usual on the float in the sun, she discovered that she was "pink and itchy." This had never occurred before. She went into the water to cool off, but on coming out found that she was covered with small welts on the arms, legs and chest. Giant hives then formed all over the legs and arms, especially on the inside of the thighs. During the remainder of the time (eight weeks) which was spent near Long Island Sound, hives always formed on swimming if the immersion period was at all appreciable. The patient also noticed that on washing

she had begun coughing and had had frequent sore throats for which her tonsils and adenoids were removed. Since that time, she had had coughs and stuffed nose which were worse in September and October, suggesting ragweed sensitization. However, she also had had a stuffed nose very frequently in winter. At eleven, she became quite conscious of that fact. Her worse attacks, however, took place when the weather was consistently hot. This also fitted in with a diagnosis of constitutional hypersensitiveness. Her parents had paid considerable attention to keeping her in an allergen-free room with the usual precautions taken for mattress, pillow, rugs, curtains, et cetera. The patient had been told that she was constitutionally hypersensitive by her physician and had been given ragweed injections to no avail.

Physical examination of the patient was negative. There was a 7 per cent eosinophilia in the blood smear, confirming the diagnosis of allergy. There was no nasal discharge. Study of the skin reactivity revealed only suspicious reactions to a few foods. Reactions to ragweed pollen were slight with solutions containing 0.2 mg. N per cc. Confirming the probability of ragweed sensitization was the presence of a moderate reaction to various tobacco extracts.

The clinical course of the patient, however, did not justify classifying this child as a simple case of hay fever. Late in May, during the grass season, she complained of a sore throat and clogged nose. On careful questioning, the sore throat turned out to be a lump in the throat, the patient herself stating that it was the "same that you get when you are about to cry." One week later, she visited her grandmother in a town nearby. As soon as she arrived at her grandmother's house, her nose became stuffed. This occurred fifteen minutes after she went inside the house, but cleared up while remaining within the house and was completely gone when she went to bed that evening. The following day, apparently helped by our discussion of the week before, instead of complaining to her mother of a sore throat, she told her mother that she had a lump in the throat. Her nose was not clogged and there was no cough. The lump in the throat this time lasted two or three hours and was relieved by steam inhalation. Again she explicitly stated to me that "my throat does not feel sore. Only feels as if something were caught there." After a few brief conversations the child was taught to distinguish between her emotional upsets on seeing her grandmother because she told her mother that "when I'm with Grandma I want no one there. Not even you—only Grandma." Further discussion led to the fact that she was anticipating the death of the grandmother. It was this idea which apparently had led to many of her symptoms.

She did not receive injections for her ragweed sensitization. Dust injections were given by her own physician. Her hay fever that year was so slight as to indicate that her pollen sensitization was a minor factor.

The clinical course of the patient has been excellent without specific hypo-sensitization except for dust.

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with cool or cold water, scattered hives also formed. This had never occurred prior to the first attack.

The patient had omitted the following fact in relating her history: she had almost drowned while in swimming the day before the onset, i.e., July 19, 1940.

Skin tests with a routine group of inhalants and foods were negative, and there was no history of food or other allergies, indicating that the patient belonged to the group having an allergic response without a true immunologic reaction.

There was no dermatographia nor was there any electrical urticaria. To definitely classify the case as one of a whealing response to cold, the patient was tested with a standard cold stimulus. Well formed wheals, pseudopods, developed after as short a period as one minute of application of this standard stimulus. The maximum height of the wheal after one minute of application of the stimulus was approximately 1 mm. Much larger wheals with marked spreading without formation of pseudopods occurred after five minutes of application. The fact that cold had not previously caused whealing raised this question. Why had the onset of this response occurred at this particular time, that is, on a certain day after swimming?

During the summer of 1940, incidental to the war in Europe, she was upset considerably. In the summer preceding the outbreak of the war, I saw the patient frequently. In 1939 she was gay and vivacious and more or less enjoyed life; in 1940 there was a definite tendency to be upset by war reports. Three friends for whom she had had a special esteem were actively engaged in the British and French navies, two in the submarine service and one on the French battleship, *Bretagne*, which had been sunk before the patient's present illness. Although the reports of the sinking of two submarines, each with one of her friends, occurred subsequent to the whealing response to cold, the death of one friend on the *Bretagne* at Oran occurred shortly before the abnormal response to cold was manifested.

The patient stated that she was a hypersensitive type because she fainted easily. She did not like the idea of skin tests. On further questioning she retracted the statement that she fainted easily and said that she did not really faint easily but "a sudden shock will cause prolonged periods of crying." She had, however, fainted before the onset of the present illness. The patient herself emphasized that anything sudden might produce an emotional upset: "If someone is suddenly rude to me, I am finished. If I tumble down the stairs, I might not be hurt but would cry."

After discussing the onset of the symptoms, the patient stated that a good many incidents relative to the development of the syndrome described did not become clarified until after a particular interview six weeks later.

One evening thereafter, she volunteered the following information. She stated that while swimming toward shore on July 19, previous to the occurrence of the hives (the day when she nearly drowned), she had really felt that she wanted to drown. She stated that she felt that she didn't deserve to live while her friends serving in the armed forces, younger than she, possibly more useful to humanity than she, had to die while she remained alive. She was quite certain that this conflict existed during the two times that she "went down."

The striking feature is the suddenness of the onset following a period of mental conflict which endangered the patient's life. Since an immunologic mechanism always involves the presence of a complete or partial antigen, and since there is no type of conventional allergic sensitization discovered in the case in question other than what one could call the presence of a sensitized state psychologically, it is not apparent how one may think of the whealing response to cold described here as similar to the ordinary allergies. Rather, one must look here for a psychological pattern which can change the physiological response as follows:

Although it may be argued that some immunologic reactions of the patient might have been altered, it is not likely that any known immunologic mechanism is primarily involved in the whealing response to cold itself in this case.

On one occasion when the patient had remained in the water about ten minutes, there occurred a severe skin reaction. In spite of the severity of this reaction, only slight dizziness was experienced. The main symptom was generalized itchiness, without anxiety, fainting feeling, or feeling of impending collapse. In other words, there was no general histamine-like reaction.

The patient moved to a cold climate after the acknowledgment of the conflict. She wrote (January 30, 1941), "Apparently you are quite right about my allergy—for the calmer I become about my friend's death the slighter the trouble. I can put hand or foot in cold water now with no swelling, but if I go out in a cold wind, I return looking as though I had been having a bout with Joe Louis. However, it returns more or less to normal within an hour."

About one year after the onset of her illness, she returned for examination and reported the following details about the loss of her whealing response to cold. She stated that at first she was not convinced that the origin of her urticaria was psychological. However, she developed "a new point of view," made new friends, and gained 10 pounds in weight. Thereafter, she noticed that she did not wheal as usual. In the summer of 1941 the patient was taken to the same spot in which the conflict

discussed in the foregoing had occurred. She swam to the same boat and back to the same pier. There was no evidence of any urticarial response whatsoever.

*Case 11*—In the following case, the allergen was accidentally suggested to the patient. B was a pretty girl of nineteen, well dressed for a clinic patient, with better manners than usual and better education than one ordinarily encounters in the clinic in question. She complained of hives of six months' duration. This patient's skin tests were negative. However, elimination diets were of no avail. About ten days before Christmas in 1941, various allergic possibilities causing hives were discussed with the patient. The role of inhalants was mentioned, and I accidentally said that perhaps even the odor of Christmas trees which were then being offered for sale could produce hives in certain individuals. The patient apparently seized upon the suggestion that the odor of Christmas trees was causing her hives. The following week, she came back full of confidence, for she was able to produce hives on going close to a large number of Christmas trees then being sold. During the following month (January, 1942) the hives persisted even though she was no longer exposed to Christmas trees. This was pointed out to her. She was asked if she could make sense out of the whole thing. She then requested to speak to me privately. We went to another room where no one could overhear our conversation. She wept bitterly. Her parents had separated when she was quite young. The burden of her education and upbringing fell upon her mother. She felt that she was not receiving all of the education and its advantages which she desired and required. The patient was placed on a full diet. In a period of months her attacks of hives were replaced by milder and less frequent episodes.

It may be argued in this case that our immunologic model in my hands did not serve satisfactorily. Be that as it may, it was quite evident from the course of the case that the suggestion that the odor of Christmas trees produced hives was followed by the production of hives. This case is presented to show that a pattern classically allergic may also be produced by conditions in which the immunologic model as yet is not clear cut, if, indeed, it is present at all.

*Case 12*.—An unmarried lawyer, A. B., thirty-eight years old, complained of asthma, eczema and hay fever. His symptoms had been present periodically for about six months.

Each one of these complaints merits separate attention. At no time while the patient was under observation was any asthma noted, nor could he justify his history of asthma by a description of a true asthmatic attack. There was present some difficulty in breathing or some modification

of the respiratory cycle at times. This respiratory difficulty was misinterpreted by the patient and his friends.

The eczema was localized to the scalp and was diagnosed as mild seborrheic dermatitis which readily responded to appropriate treatment.

The complaint of hay fever seemed to be justified and was essentially the main symptom. It was not induced by temperature changes, nor was it exaggerated by dust, perfumes, foods or any of the allergens responsible for rhinitis. The family and past personal history for allergy was negative.

The patient was well developed, well nourished, co-operative, far above the average intelligence, and a meticulous person in dress and in manners. Rapport was readily established when the usual medical matters were discussed. It was evident, however, that the usual routine physical and laboratory examinations were not only important from the point of view of the physician but also from that of the patient, who showed more than a casual interest in their outcome. Physical examination, as well as laboratory findings, were negative, including the skin reactivity to an extensive series of allergens, including dusts from various sources, pollens, foods and mold spores. There was no local condition in the nose to account for the symptoms nor was there any eosinophilia in the blood.

A more detailed analysis of the time of occurrence of the hay fever was undertaken. The patient finally revealed that his hay fever occurred chiefly after fatigue or nervous strain. He volunteered that if he stayed up late at night he had severe hay fever the next day. In spite of the fact that the patient recognized the relationship of these nasal symptoms to his emotional state, this recognition did not result in any diminution of symptoms. The patient challenged me to do something about his symptoms. The usual local medicinal therapy was employed to no avail. On a basis of empiricism, injections of dust and stock "cold" vaccine were suggested but were rejected by the patient.

The patient was discharged without relief and went to another city. Four months later, the patient reappeared and announced that his hay fever had practically disappeared but that he was feeling very depressed and was extremely unhappy. After some discussion he made the following disclosure. During the time that the allergic status of the patient had been investigated, he had been interested in a young woman whom he had seriously considered marrying. During his absence she had married someone else. It was this fact which occasioned his feeling of depression, coincident, however, with the disappearance of his "hay fever." He emphasized that he had really always been very uncertain in his attitude toward the young woman in question. He was extremely perturbed because he felt that he had not done the right thing by not marrying her. During subsequent conversations which touched on personal relationships and obli-



gations, he appeared to be much relieved and much more cheerful. He then made a special appointment when he appeared with a new friend, feminine, blonde, and attractive, and without much ado he introduced the young woman and then said goodbye.

*Case 13.*—The effect of a suppressed conflict on the origin of "allergy" to light has to my knowledge not been shown hitherto<sup>1</sup>. A patient who responds to irradiation by ultraviolet light by whealing of the skin has been studied, both from a physiological and psychological point of view. Although these studies are not complete, it is desirable to report progress made thus far. The patient is a married woman, W.G.H., forty years of age, whose skin shows a general response of hypersensitiveness to ultraviolet light by a whealing reaction over all the body surfaces studied. The wave length at which whealing may be produced begins very close to 3,700 Å and extends to lower wave lengths with increasing sensitiveness in the region where absorption by the outer epidermis occurs. The patient was referred by another physician who had explored therapy from the point of view of many of the theories dealing with the whealing response, including a high calcium diet, vitamins, as well as irradiation of the blood serum itself, followed by re-injections. The patient was subjected to many types of conventional therapy without any success. The *original* history of the patient was as follows:

Approximately eight years before the patient came under observation, she went swimming at a nearby beach. She remained on the beach several hours. Following this exposure to sunshine on the beach, she suffered an attack of "sun stroke" and remained in bed, ill, for two weeks. When she recovered from her attack of "sun stroke," she noticed that she swelled up whenever she went out into the sunshine, especially in the summer sunshine. She could expose herself to sunshine in the winter to a certain extent. Protection by window glass was incomplete. The severity of her skin reaction was so great that she was unable to perform her ordinary duties as a housewife. In the summer, it was almost impossible for her to go out into the street because, even though she carried a parasol, reflected ultraviolet rays caused very severe edema of the ankles and legs. Similarly, even when driving in a motor car, the reaction to reflected ultraviolet was quite severe unless the windows were closed.

After being under observation and submitting to many tests for a period of three years, a state of anxiety supervened. She related her symptoms to "early change of life," and endocrine therapy was instituted. At the same time, her history was cautiously re-explored, especially concerning the exact time when the whealing response to light first occurred. After many interviews, the following additional aspects in the history became clearer.

The patient and her sister were orphans and had lived together as un-

married girl. Subsequent to the marriage of the sister, the patient resided with her sister and husband. During the time that she lived with her sister, the sister's husband made advances which were rejected by the patient. Because of this difficult situation, she was forced to leave her sister's household without an adequate explanation. This gave rise to a complex family situation.

On careful questioning, it appeared that on the day the patient was in swimming (the day subsequent to which she developed *urticaria solare*) the sister and her husband unexpectedly appeared at the beach. On seeing her sister and her brother-in-law, the patient ran into the water and remained partially submerged in the water for three hours, explaining to me: "I did not want him to see me in my bathing suit." It was only after her sister and brother-in-law had left the beach, that she came out of the water and subsequently became ill.

After tracing the events of the intervening years, during which she had married and there had been no amelioration of the difficult family situation, the patient's present and newly precipitated state of acute anxiety seemed to have been occasioned by an unexpected visit of her brother-in-law when she was at home alone. This unexpected visit had preceded her new symptoms.

Further questioning only led to a repetition of the above story. The seriousness of the emotional reaction of the patient led to further exploration. It appeared that something in our folklore would lead to an explanation. It was customary in Biblical times for a husband, on the death of his wife, to marry the sister of the wife. This was cautiously explained to the patient and she was asked if any situation corresponding to that ever arose. Her answer was immediate. She said, "Of course. He always told me, 'When your sister dies, I'm going to marry you'." No attempt has been made as yet to explore this lead, although the conflict situation produced anxieties and organ neuroses readily "cured" by placebo. Her sensitivity to light has persisted unchanged.

The most common cause of the skin wheal, dermatographism has no immunologic basis whatsoever.

#### EMOTIONAL DISTURBANCES—CAUSE OR EFFECT?

The relationship of the emotional disturbance to the development of the allergic pattern may be considered from two points of view. In the first place, the emotional disturbance may play a role in choosing the organ and changing the neurovascular system so that the thresholds are lowered and the intensity of the allergic pattern is increased or decreased. In the second place, the resultant allergic syndrome may have a special effect itself on the emotions of the individual so that a vicious cycle arises. This question

has been considered by Rogerson, Hardcastle and Duguid,<sup>11</sup> who asked whether the intense need of children with bronchial asthma for mother's love is one of the causes of their asthmatic condition or a result of it. There was much to suggest that the acute dependence on the love of the mother might result from the asthmatic attacks themselves. If I may quote French:<sup>4</sup> "A severe attack of asthma, with its acute threat of suffocation, is a terrifying experience and one in which the patient feels completely helpless. What wonder, then, that a child who is constantly threatened with the danger of suffocation and whose activity must be limited for fear of bringing on an attack should feel the need always to have near him a mother to whom he can cling? There is, accordingly, every reason to expect that the asthma attacks themselves should induce just the sort of helpless dependence that has been found to be characteristic of the deeper emotional life of our asthma patients. May not the personality traits that we have been describing be merely a secondary reaction to the disease itself?"

There are, of course, too few data to draw any unequivocal conclusions. I hope that the members of the Panel and of the College will discuss, for the record, in what way they believe that the allergic patterns, especially asthma and skin manifestations in the infant, in the child and during later life, may influence the personality structure.

#### THE COMBAT EQUIVALENT IN THE ALLERGIC PATIENT

It was shown by Peshkin<sup>12</sup> in 1922 that in a group of 500 children considered otherwise relatively normal (no clinical allergy), approximately 10 per cent showed positive skin tests to a variety of allergens. He observed these children during a period of years. He found that some of these immunologically positive children were often precipitated into acute episodes of clinical allergy, especially asthma, by other presumably unrelated conditions, as for example, whooping cough, measles, pneumonia, upper respiratory infections, and even following operations for the removal of tonsils and adenoids. It is of interest that Peshkin

regarded these superimposed diseases or procedures as the initiating factors which led to the clinical manifestations which had been viewed in a preliminary way by the immunologic reactions in the skin. In 1926, Peshkin further developed his concepts to the point where he proposed the clinical syndrome of para-asthma. The term para-asthma was introduced to segregate bronchial asthma due to immunologic hypersensitiveness from asthma not due to immunologic hypersensitiveness. Similarly the term para-allergy may be utilized. Since infection or trauma could influence the onset of allergic patterns in individuals previously shown to be allergic without clinical patterns, why cannot disturbances neurogenic in essence produce similar reactions, perhaps even to initiate them? These could be included in the para-allergy group. All of this implies that the immunologically allergic individual already has patterns carved as it were by his response to allergens. In the individual without known immunologic patterns, these patterns nevertheless exist, as we know from clinical experience. These patterns exist just below an explosive threshold where another stimulus, such as a difficult life situation, may result in an overwhelming clinical response. These life situations can possibly be considered analogous to combat equivalents. The argument may be raised that combat situations are not similar to ordinary life situations. That view is open to question. The combat situation really occurred the first day war was declared or war was imminent. It might have expressed itself clinically upon notification by the draft board to report or in more rugged individuals only after prolonged periods of combat. If one accepts the point of view that many of these individuals who have been subjected to difficult combat situations were subsequently successfully treated by physicians rapidly trained in psychodynamics, we might have another basis for rapprochement between allergy and psychodynamics. This possibility will be touched upon briefly in the next section. In it we will assume that the allergic individual faces, in his daily routine, life situations which may be combat equivalents. The immunologic model and the clinical pattern has already been deeply carved into his physiologic structure so that

given certain types of life situations the clinical response is very much out of proportion to the situation itself.

#### FUTURE PROGRESS

There are two steps necessary to achieve a fundamental advance in the specialty of allergy as far as its relationship to psychodynamics is concerned. The first step involves a change in the editorial policy of the leading journals devoted to allergy and to psychosomatic medicine itself. It would, for example, be refreshing to find case records in the journal, *Psychosomatic Medicine*, showing that a pattern typically psychogenic in nature turned out to be based upon an immunologic mechanism. Similarly, contributions designed to emphasize the role of emotional factors in the allergic patient must be encouraged, even sought, by the editorial staffs of the allergy journals.

The second step involves systematic postgraduate instruction in psychodynamics. Ideally, a personal psychoanalysis should be a requirement for the study of psychodynamics. But at present this preparation must, in general, be reserved for the student and the younger physician. Few of this younger group will become psychoanalytically trained allergists under our present system of training and specialization. Cannot this problem be answered by comparable situations of the last war? The acute war neuroses were often successfully treated by physicians rapidly trained in psychodynamics. If the great mass of data which now comprises the basic science of psychodynamics were to be classified into a form capable of being more easily understood and applied by the allergist, an important advance in the science and practice of allergy itself would take place. Allergy would then become a more useful specialty than that which could be provided by either the allergist or by the psychiatrist working alone.

Some may conclude, in view of our present knowledge and attitudes that these steps are either undesirable or impossible to attain. However, an appreciable number of my colleagues and I believe that with proper instruction and proper sympathy, this program is neither impossible nor undesirable. The success of this proposed publication and instructional program cannot be

estimated until a serious attempt is made to carry it out under suitable auspices. Without such an attempt, neither group will be able to understand the other or help the other group to synthesize the complicated psychosomatic syndromes under discussion, during our time. With this attempt, perhaps implemented and encouraged by this Round Table, a new and broader phase of clinical allergy will have been initiated.

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## Panel Discussion

Dr. Frank Fremont-Smith, New York, N. Y.—A couple of years ago I had to give a paper at the Academy of Medicine, and as usual I didn't prepare myself too well for it. I had dictated a few notes which my secretary had typed for me, and then I had scribbled a few additional notes in longhand; beyond that, the paper was blank. I started out bravely enough, but as I got down in my notes to where the typing ceased, my mouth began to get dry; and as I stepped off the deep end, where I no longer had anything written down, I found I couldn't say a word. I motioned frantically to the chairman, who graciously got up, lifted a large thermos bottle, took off the cover, and started to pour. Not a drop of water came out. It was empty! The audience roared with laughter—or at least they laughed, and in that moment I was able to join with them. Then I found I didn't need any water. My saliva returned, and I was able to talk.

At the moment, that is the simplest model I can give you. We have had a lot of emphasis here on models of psychosomatic problems. Our chairman said we should try to find a common denominator. I suppose there is someplace where this ball, which is suspended somewhat as I am in mid-air, can come to rest. We have Dr. Abramson's suggestion that we should give attention to the kitten, and what the kitten is up against, this is not too good a model, but still not a bad model for us to study. We have the analogy of the newborn infant. I think I can say that in the infant there isn't any problem about psychosomatic unity. There is no separation, whatever there is in the infant on the psychological or somatic side is clearly a unified entity. Out of such an infant, or similar infants, arise individuals like your speaker, or your patients with their psychosomatic problems, where we have

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into the one individual. Now what we need is a scientific basis, a sound basis, for talking about the phenomena with which we are all familiar. I mean, we are all familiar with the fact that one's mouth may get dry under the circumstances I have related, indicating that the blood flow through the salivary glands has been

sharply reduced. There is no question then that that is a psychosocial situation, or at least a situation that can be described in that way, which makes a psycho-neuro-physiological impact on the individual, which then results in a somatic change. That seems to be perfectly clear. Of course, there are a lot of other problems where it isn't so clear. I should therefore like to say a few words about the basis on which we can discuss these problems.

We know that those experiences which we call emotional experiences, or which evoke emotions in us, activate the vegetative nervous system, and through the vegetative nervous system activate the hormones. You are well aware that the sympathetic and parasympathetic nervous system reaches every organ and practically every cell in the body, and that the hormones circulating in the blood and released by emotional stimuli reach every cell in the body. Therefore, it seems perfectly reasonable to assume that the functional activity of every organ and every cell in the body, under appropriate circumstances, may be stimulated through the impact of emotional situations. If that is the case, then we don't have to raise our eyebrows *a priori* at the idea that any particular function may be deranged. But we do need further evidence to specify how this dysfunction occurs, so that we can understand it, and we must not assume that a function is deranged on an emotional basis just because there is a potential psychological mechanism. We need to specify both ways: one, the exact physiological mechanism, and two, the emotional mechanism. Only then can we say that we are approaching the problem on a scientific basis.

As for examples, may I mention a few: *Respiration*—We all know that an individual may, under emotional stress, over-breathe so greatly, over-ventilate so much, as to wash out his carbon dioxide and develop alkalosis, tetany, and even a convulsion. The most severe degree of alkalosis ever measured in the human blood was in a case of hysterical over-ventilation. *Digestion*—We are well aware of the influence of emotions on the digestive tract. *Sexual potency*—There is no other factor that competes in any way with anxiety in producing impotence both in the male and in the female. *Menstrual function*—We have no problem in recognizing the fact that emotional tension can both increase and decrease menstrual function. *Perspiration*—I have experienced a little bit of that today, partly by the warmth of the room and partly by my earlier anxiety.

So far, I think, there probably wouldn't be any disagreement. There is a tendency, however, to say that if a person has a pathological process, that is a purely somatic situation. Since every

organ system, when it is normal, may have its normal activity modified under emotional stress, isn't it a little far-fetched to say that it becomes immune to emotional stress? It doesn't become

this: *The patient*

*with peptic ulcer*—The war situation brought out very dramatically that not only were ulcers produced in patients in whom there was no clear evidence of an ulcer before, but also those who had previous ulcers were made very much worse under tension, and in many instances hemorrhage and perforation were precipitated by acute anxiety situations. *The patient with psoriasis*—This disease is not primarily due to emotional tension, as far as I know, but it certainly fluctuates parallel to the fluctuations of emotional state.

When I am disturbed emotionally because then I begin to see halos around lights at night." Such patients may be precipitated into acute and very damaging glaucomatous attacks under emotional stress. *Symptoms of the menopause and the patients with diabetes*—The menopause

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Reynaud's disease is characteristically precipitated by exposure to a chilly atmosphere, an emotionally charged atmosphere, or may be precipitated by the onset of an acute infection. In all these instances the sympathetic nervous system is activated, there is no reason why the blood vessels, which are hypersensitive to sympathetic stimulation, shouldn't go into an attack of Reynaud's disease, as they do, whether the sympathetic stimulation comes from emotional pressure or comes from exposure to cold. Because I think it is of considerable practical importance, I want to call your attention to the work of Wolff and Mittelman on patients with Reynaud's disease, in which they showed that when the patient was under anxiety it took much less cooling of the room, in which the patient was exposed, to produce an attack; they were able to produce attacks in the patient without chilling the room if they had him discuss problems that were emotionally disturbing. Now if in a cold room it took only relatively little anxiety in the discussion to precipitate an attack,

whereas in a warm room this anxiety did not cause a spasm of the blood vessels. Thus, external environment in the form of cold and emotional environment in the form of anxiety may activate the same physiological pathways and summate each other's effect in producing the physiological disturbance or the symptoms of disease. I think that in this we have a very simple and direct analogy in relation to sensitivity to pollen, whether it be hay fever or asthma, where the influence of anxiety may potentiate the influence of the pollen. The patient may be exposed to a degree of pollen which under ordinary circumstances wouldn't affect him, but which, when he is under a period of stress potentiates into a severe attack.

My early work was on the chemistry of the cerebrospinal fluid. (I mention this for the purpose of gaining respectability. Our friend, Dr. Harold Abramson, is relatively respectable when he talks about these emotional problems because he has done some very good work in physical chemistry!) I found I could not measure spinal fluid pressure unless I had the patient relatively calm and relaxed, because if a patient was anxious while I was doing the lumbar puncture and measuring the pressure, I got either a too high or a too low pressure—too high when the patient held his breath and raised his venous pressure, which raised the spinal fluid pressure (and naturally some patients hold their breath when they are anxious), and too low when the patient over-ventilated and began to pant, which lowered his venous pressure and brought the spinal fluid pressure down. I also learned something else that was very interesting to me, and that was the effect the lumbar puncture had on making it possible for me to elicit from the patient personal history which had never been told to me before or, as far as I could make out, to anyone else. I began to meditate on the influence of lowered intracranial pressure upon release of emotional factors. I soon came to realize that it wasn't that at all. What had actually happened was that I had produced *an anxiety in the patient by planning to do, and by doing, the lumbar puncture*. Then because I used novocaine nicely, and didn't hurt the patient and reassured him afterwards that he really hadn't gone through anything very bad and not nearly as bad as he had expected, his relief and gratitude established a relationship under which he could tell me things he had never told me before. A good many medical men have found that it is very important to save a period of time immediately after the physical examination to go back and take some more of the patient's history. When you have finished the physical examination, you can almost always say, "That is a fine pair of lungs you have" or

"It's a good heart" and the nation is called to

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can, by saying, for example, "I don't see any sign of cancer in you today," you have established a rapport; your patient will find it much easier to talk to you about things he could not have told you previously, and actually perhaps couldn't remember before.

One word about this business of remembering: Dr. Ira S. Wile some years ago used the term "forgettery" in opposition to the memory. I think we should pay more attention to it.

The viewpoint that

the best contribution

to the whole problem, is that the vegetative responses over reactions of the body to emotional stress are greatest when that emotional stress is pushed out of consciousness, when the patient is unaware of it. That is very important, and it is true. In the first place, it explains why, if you ask a patient, "Were you emotionally disturbed at the time you had the attack of asthma?" he practically always says, "No." I encountered this in patients with epilepsy, many of whom had convulsions precipitated by emotional conflict, but they always told me there was nothing disturbing them at the time of the attack. If we recognize that the emotional conflict which is most likely to produce severe bodily disturbance is one which will be wholly or partly pushed out of memory, and in the forgettery of the patient, then we will have to approach the patient so as to get our history in a way which will bring out these forgotten pasts. When you try to get the dietary history of a patient, you are well aware of the fact that they often have forgotten what they have eaten, and you find it important to learn whether there was forgotten food that caused the symptoms via the gastrointestinal tract. It is equally important to find out whether there was a forgotten conflict which played a role in the symptoms, i.e., a mother-in-law, because unless we can find ways of getting the history which will tell us what role emotional factors have played in any given case, we are going to be lost.

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It may be the main problem; it may be only 5 per cent of the problem, even though the patient is highly sensitive, as was brought out in some of the cases that Dr. Abramson mentioned.

You might ask what is the evidence that forgotten factors play



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how emotions can stimulate the vegetative nervous system, then it seems to me that we have a sound basis for discussing these problems.

Dr. Edward Weiss, Philadelphia, Pa.—The essence of the psychosomatic approach was expressed by Dr. Abramson in the statement that he continued to take a history while he was skin-testing the patient. That is really what is meant by psychosomatic medicine: the simultaneous application of physiological and psychological factors in the treatment of the patient, in an effort to achieve a more complete understanding of the patient. This does not mean to study the soma less; it only means to study the psyche more. When a person gets sick, he is sick all over—the body and mind.

When we approach a patient we must do so asking ourselves three questions. What kind of a person are we dealing with? What are his physical and psychological characteristics, inherited and acquired?

In other words, what is the pathogenesis? For example, allergic responses occur when a prepared organism, possessing certain physical and psychologic characteristics, meets certain elements, physiologic and psychologic. In some allergic disorders a single preponderant factor may be largely responsible, as, for example, in pollen hay fever. In others, such as asthma, there are frequently multiple interrelated factors, allergens and emotional disturbances which act in a complementary fashion to produce the disorder.

We try to establish certain postulates for an allergic problem, hay fever for example: (1) heredity, (2) seasonal history, (3) skin tests, (4) antibodies, (5) induction of an attack with pollen, (6) history of emotional factors.

... and a childhood neurosis, (3) sensitivity to specific emotional factors (temporal relationship of present illness and

a role in the behavior of organs, and I may answer, they play a very important role in the behavior of an individual as a whole, in his social behavior, and in his behavior in relation to other people. The most clear-cut evidence there is goes right back to hypnosis.

The data from hypnosis is perfectly clear and is reproducible. An individual who is susceptible to hypnosis (and not everybody is) can be hypnotized and told at one o'clock that at three o'clock he will hang an umbrella out of the window, balance his rubbers on the end of it and whirl them around, and also be told that he will forget that he was ordered to do this while under hypnosis. When he is awakened from the hypnosis, say at 1:30, everything is perfectly normal until three o'clock, at which time he goes and gets his rubbers and his umbrella, and puts them out of the window and waves them around. You ask him why he is doing it, and he will give you a very logical reason; he may say it is some experiment on gravity that he suddenly thought up, and he will, as we say, rationalize his actions. But he is actually motivated by a force about which he has no understanding or memory at all. This can be repeated again and again. Moreover, if you prevent such a person from carrying out the instructions, if you get him away, or if he can't open the window, then he will exhibit a minor anxiety attack. There is a very deep compulsion to carry this thing through, and that is also true of our unconscious motivation in general. In Dunbar's *Emotions and Bodily Changes* (Columbia University Press, 1935) there's a report of a hypnotic experiment in which two groups of patients were hypnotized. One group was told that they were going to be given, after the hypnosis, a laxative medicine, and the other group was told they were going to be given medicine which had a constipating effect; but actually the medicine was reversed. The gastrointestinal tract proceeded to obey the suggestion given by the hypnotists and not the pharmacodynamic action of the drug. I think this experiment is subject to reproducibility, and for those who doubt it, perhaps it should be re-investigated again. There isn't any question, however, that organ systems can be influenced in their functions by such hypnotic phenomena.

Freud, who developed the whole psychodynamic concept, had his first experience from hypnosis; and we go back to hypnosis for the fundamental basis of recognition that it is possible to have a forgotten unconscious motivation which influences one's behavior as an individual in relation to other individuals, or influences organ systems in relation to other organ systems. If we are on sound ground there, and if we are on sound ground as to

... .. department, preclinical  
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teachers are available in these various departments who have a real understanding of psychodynamics. And beyond this, or rather before this, our students must come to us prepared in the social sciences as well as in the physical sciences. And the social sciences must include a psychology that gives a better explanation of human behavior than is now furnished in most colleges.

All of this, unfortunately, is a long way off, and yet we are moving swiftly. Military medicine gave a great impetus to this development, and the pressure is going to come from the people themselves. We would be wise to anticipate them. Therein lies our hope for an important development in medicine. As a part of this process and essential for its development, general hospitals must establish divisions for the observation and treatment of psychoneurotic and psychosomatic problems. The time has passed for psychiatry to lead an isolated existence. Until it is brought into physical proximity with general medicine, it cannot achieve final integration into the body of medical knowledge.

Dr. Hal M. Davison, Atlanta, Ga —Any apparent differences in the discussion of psychosomatic factors and allergy are often almost entirely a matter of viewpoint. If you have not already come to this conclusion, you will rapidly see that there is no conflict between the viewpoints of the allergists and that of the psychiatrists. In the beginning of our study of allergy many years ago, all that allergists thought about was determining just what the patient was sensitive to. On the other hand it has not been many years since the psychiatrist superticiously looked down over his nose and laughed if an internist suggested that a psychiatric patient needed a complete physical examination. In our part of the country this was so much so that I just stopped discussing the subject with those who treated nervous elements, and continued to work on the idea that an idiot will find something if he looks hard enough, while the smartest man in the world is going to miss it if he doesn't look. However, and perhaps I should have said this first, the internist was in just the same condition. Early in my medical life, when neurotic patients began to be a part of my practice, I searched for something helpful from other internists and general practitioners. Most of them didn't even bother to look down their nose and laugh. They simply turned their backs on me. Others said, "Oh hell, it's just another nervous

), especially at epochal or crucial  
ge, childbirth, climacteric, et cetera),  
icture (other evidence of neurosis or  
'emonstration of specific behavior on  
exposure to a conflict situation),

(6) hyposensitization by psychotherapy or the avoidance of the provocative situation.

So far as allergy is concerned, the fact that the removal of an allergen or a hyposensitization process "cures" the patient proves only that one factor has been removed and the morbid chain of events interrupted. Exactly the same reasoning can be applied to psychologic factors.

Having tried to establish a psychosomatic diagnosis, that is, an evaluation of physical (allergic) and emotional factors, what can we do about it? I speak as a practitioner of medicine and not as a psychiatrist, and that is a very different matter. When a patient comes to the psychiatrist he comes prepared to talk about his emotional life, but when he comes to the internist or allergist he is prepared to find a physical cause for his trouble. And, too often, he is given a physical explanation because the practitioner does not know any better or because he doesn't trust himself to deal with the emotional aspects of illness or because he hasn't time to go into such matters. What is our function in this regard—how far should we go? Can you safely continue to ignore the emotional life, or must you prepare yourself to psychoanalyze every patient? Obviously the answer is somewhere in between. Just as most practitioners are prepared to do minor surgery and to recognize the indications for major surgery, so must every practitioner be prepared to administer minor psychotherapy and recognize his limitations so that he may refer the major problems to competent specialists. As Lindemann has said, "Clumsy psychotherapy is just as dangerous to the social life as clumsy surgery is to the physical life."

Unfortunately, this cannot be taught in an afternoon, no matter how fine a beginning we recognize this meeting to be.

It is my hope that every physician will be so trained that he may be able to understand and manage the many emotional problems that are presented to him daily. At the postgraduate level we need short orientation courses in centers that are properly staffed. At the graduate level, better training facilities should be developed for residents in medicine, and the other medical specialties, to acquire psychosomatic approach to medical problems. At the undergraduate level, we need, not more and more hours of psychiatry inserted into the curriculum, but a real integration of

just what the background of this particular symptom was. It came about in this manner: I would take a woman to the window on the second floor of our building and request that she look across the street and imagine that she had a two-year-old baby girl over there with a nurse, and that just before the green light flashed on, the little girl broke away and ran out into the street in front of jeeps, motorcycles and trucks. Then I would ask her how she would react, and I would throw out my arms to the little girl, suck in my breath, and imagine that my heart was pounding away, that I couldn't breathe, and that my fingers and arms were tingling. I would then explain to the woman that she would be very apt later on to wake up in bed from a deep sleep at about three o'clock in the morning, and go through all of these symptoms. One morning as I lectured on this syndrome, much to

the surprise of my audience, I said, "This simplification of psychiatry to what we might call 'behavioral physiology,' brought about through the conception that all of our responses are due to stimuli and modified by conditional reflexes, has been of great help to me in attempting to understand my patients and also a help in teaching patients. Both in studying individuals for diagnosis and in teaching them, we have to watch ourselves to prevent our putting them all in one classification. Neither must we compare one with the other. Each one must be a separate study and comparisons are made only for the purpose of understanding better. Up to the present time, no one has been able to show that a psychotic patient or a neurotic patient is more apt to become allergic than any other patient. A study of our allergic patients does not show that they are more apt to become neurotic than other people. However, there is no reason for us to say that psychic factors are any less apt to affect an allergic individual than they are others."

Before we go much further in attempting to correlate psychosomatic factors and allergy, we have to remember that no one knows anything so far as to why an individual becomes allergic. We do not know why one individual may be allergic at birth, or practically at birth, and one mother absolutely swore to me that her child started to wheeze while he was being born. Dr. Macleod of Columbia University said to me in 1934, "I have never seen a child who was not allergic to something. Nor is there any person, nor is there any animal, nor is there any plant, nor is there any substance to a food, or to a dust, that one grain of that particular

patient. Let them alone." Some others said, "You had better quit fooling with them, or you will be just like they are."

At the present time, all this is changed. I do not think that there is an allergist in this room who does not always try to examine his patients from all angles and to discuss with the patient all involved factors—psychic factors, somatic factors, and allergic factors. To be sure, none of us yet understand enough about any one of these factors. However, one thing we may be sure of, and that is that every individual can only be a composite of two things: first, what he was born with, and second, what has happened to him since he was born. If we reduce man and animals to their simplest factors, we may say that there is no difference between them and an electric light, except that when we turn the light off and on a million times, provided the factors that produce the light remain constant, it will respond to the stimulation of being turned on in exactly the same way every time until it "dies." Theoretically, man as an animal cannot react in the same way to stimulation, because he has a memory and, presumably, has reasoning power. Memory, and what we might call a subconscious reasoning power, produce together what Pavloff called the "conditioned reflex."

Apparently man will reproduce certain emotions or symptoms over and over again, depending on this mechanism of conditioned reflexes. However, if we analyze them carefully, even this reproduction changes from time to time because of other experiences added to it. No matter what type of practice of medicine we are engaged in, every one of us will have to see from time to time some neurotic people. Unfortunately, we do not have enough trained psychiatrists to teach and treat all nervous individuals, and, unfortunately, not enough to teach all allergists. No doubt, it would be better for us and better for the patient if we did have a sufficient number. However, the rest of us have to pinch-hit in the best way that we can.

In speaking of neuroses in a collective sense, it is my opinion that we do not have what we might call, in comparison with a neurotic individual, an absolutely normal one, since a neurosis in its simplest analysis is produced as an occurrence of a normal symptom in exaggerated form, causing the patient to misinterpret the symptom and to attribute it to some somatic disease. For many years I had been telling my patients that I could take every symptom they had and find the counterparts in their so-called "normal responses to stimuli," with the exception of one, and that one was the sighing respiration. Then it suddenly came to me that through all these years I had been explaining to my patients

such as blood and urine examinations, x-rays and diet and environmental control, as well as by medication and injection treatment for a long period of time. This is, in a sense, analagous to the psychiatric analysis given over a similar period. During this time, we learn a great deal about the patient and we educate him, giving him an insight into his condition, while he educates us, giving us more and more information regarding his immediate and remote environments.

Rarely, we follow a second pattern. The patient comes to us with a typical story of having had wheezing in the recent past, and having been left alone to tell his story, says, "I wonder whether or not my wheezing may be due to such and such a cause." If we are honest, we say, "It may well be so. Eliminate what you suspect as the cause." The patient then often notifies us that his symptoms have completely ceased.

This is of course analagous to a laboratory experiment, which occurs only too rarely in clinical medicine. It also has its psycho-

... especially wheezing. It is interesting to note that these are limited to conditions in which the changes are chiefly functional, as wheezing, cough, nasal stenosis, and pruritis, rather than conditions in which there are signs rather than symptoms, as in eczema or in urticaria.

I was much impressed by the fact that Dr. Abramson and Dr. Fremont-Smith were both so anxious to prove themselves "respectable scientists," and I, not having heard the autobiography of either, find that I prepared for this talk with notes indicating that I, too, am a respectable scientist. At the University of London,

we ... On the ... found such ... logical etiology for hypertension or for peptic ulcer was only rarely, if ever, hinted at, and with a commiserative smile. Now my desire to balance my interest in psychological medicine may be the origin of my interest in drug and specific therapy of asthmatic patients.

In any case, we can reach identical goals by differing paths. Dr. Abramson came by his present point of view by a series of explanatory crises. I was pushed into my conversion by a group of patients, of whom I would like to describe one.



allergen will be sufficient to reach the reactive level, while in another individual to reach the reactive level it is necessary to eat the same food for four days in succession? We do not know the cause of these variances, but there must be some common factors present in every one of these cases. They are being studied. This factors, of at all or may

be due to malnutrition in parents has been overlooked. There is some evidence to show that malnutrition in parents may cause one type of deformity or disease in one child and another type in another child.

Another interesting factor, perhaps present in all physicians, and, perhaps indeed, in all humans, is the fact that we tend to notice primarily the things with which we come in contact most frequently, and we may be absolutely ignorant, or even unbelieving, concerning truths that we do not actually see ourselves. Only a few weeks ago I asked a friend of mine, a very highly educated and intelligent allergist, what percentage of his patients presented symptoms of what we now refer to as "cerebral allergy." He answered that he had never seen a case. The next day someone asked me about another form of allergy, and my answer was that I had never seen a case of this type. We must watch ourselves to be sure that we are not guilty of that unforgivable professional sin of holding on to a half truth so tightly that even psychiatrists can't pry it out of us.

In closing, I wish to point out that Bray, of London, was the first physician to call attention to the fact that there were distinct and definite personality changes in allergic children, produced by eating foods to which they were sensitive. These children, when first examined, were typical "*enfants terribles*," unreasonable at home and in school, but when the foods to which they were sensitive were removed from their diet, they became nice, loving, co-operative children.

Dr. Ethan Allan Brown, Boston, Mass.—As I listened to the last two speakers, I found myself saying, "Much the same thing has happened to me." I kept making notes of questions to ask. The present ideas are a rather vigorous selection of some of these notes.

All of us are conscious of the fact that we follow two patterns in the study of our patients. The first is characterized by a meticulous history, a physical examination, laboratory studies,

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 spectable scientists," and I, not having heard the autobiography of  
 either, find that I prepared for this talk with notes indicating that  
 I, too, am a respectable scientist. At the University of London,  
 we were not given intensive training in psychiatric medicine. On  
 the medical school side, we did not go further from the ground  
 than the conditioned reflex. In the clinical days, we recognized  
 such clinical entities as paranoia and hebephrenia. A psycho-  
 logical etiology for hypertension or for peptic ulcer was only  
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 explanatory crises. I was pushed into my conversion by a group  
 of patients, of whom I would like to describe one.

In a medical school, where we prided ourselves on our scientific attitude, and in a hospital where we felt that what could not be measured in a laboratory did not exist, I had two patients, opposite each other in the same ward. The first was a young man who had had asthma from his early teens until his late twenties. The second was an older man with a history of twenty to thirty years of continuous wheezing, with occasional severe attacks. The first patient was being put through our history, laboratory studies, and tests. The old man was being treated as best we could because he was beyond hope. He had a cor pulmonale and a congestive heart failure. One night he died.

While I was on my way through the wards the following day, the young patient quite casually remarked that the old man had died. And when I nodded my head affirmatively, he continued the conversation by saying, "What of?"

If he had been a medical student or a physician, I would have answered "Cor pulmonale and its sequelae," but instead, for some silly reason I said, "Asthma!"

The patient looked at me with a most thoughtful expression and said, "Can you die of asthma?" I answered, as I remember, a little impatiently, "Why of course you can."

"Good God!" he exclaimed. "I'll never wheeze again."

And he never did. He discharged himself the following day. He ignored all the results of the studies, and steadfastly refused to follow any of our instructions, since he considered them unnecessary, and he never wheezed again. I saw him over a period of several years, occasionally meeting him outside the hospital. His attitude was best typified by his own expression

"No wheezing for me. Once is enough."

It was just as though I had discovered a single allergen and removed it, except that it was in another frame of reference. You may, if you wish, term what happened shock therapy.

It is . . . help the patient help  
himself . . . inactivity," by sitting  
back . . . is own way. In this  
way, we discover those patients who, in giving their histories  
(itself a psychiatric technique), heal themselves.

Dr. Sandor Rado, New York, N. Y.—This symposium has for the first time brought your distinguished Association into contact with psychiatry. We psychiatrists have learned from you that a maiden exposure such as this is not without danger, for psychiatry may act like an allergen upon your organization. By the

formation of intellectual antibodies, you may ready yourself to produce a veritable allergic reaction when psychiatry reappears on your program.

Fortunately, Dr. Abramson organized this conference with

and we investigate the same organism, there should be no valid contradiction between our concepts, findings, and therapeutic procedures.

You study the allergic reactions of the organism, we the psychological levels of integration which preside over the activities of the organism as a whole. Psychological responses, notably the subdued yet sustained emergency emotions of fear and rage, move the entire organism and thus may interfere with healthy function.

As this happens, as it often does, a vicious circle is set up. In accord with this general functional design of the organism, it is certainly feasible that emotional and allergic reactions interact with one another and that this interaction

At the present time, we are preparing the ground for the experimental study of pathways, mechanisms of transmission, specificity, and other basic mechanisms of the problems. To facilitate progress and keep our speculative and investigative methods

The allergic patient, at least the one refractory to the usual methods of treatment, should receive psychotherapy to relieve him from

We must be prepared to meet the reaction is not a simple matter. It is a complex process. How can we be at

Psychotherapy can benefit the allergic patient by raising his level of adaptation. What influence this psychological improvement will have on his allergic condition remains to be seen.

In simpler cases, allergic and psychiatric treatment should be

combined and carried out by the allergist himself. To be able to accomplish this, the allergist will first have to familiarize himself with the fundamentals of psychodynamics and the techniques of minor psychotherapy. We psychiatrists will be delighted to give him all the assistance we can in this endeavor.

**Dr. O. Spurgeon English, Philadelphia, Pa.**—I feel very honored to appear as a guest among you when you are considering the importation of more facts from another discipline in studying the allergic problem. My knowledge of allergic phenomena comes from working as a psychotherapeutic technician and trying to bring some improvement to patients through modifying the emotional factor in some of these cases. I am sure I don't need to say in this group that people suffering from the symptoms of allergy can be very sick and very uncomfortable people. It has often struck me that after what Dr. Abramson has referred to as psychomotive forces have gained enough strength to make an impact upon the immunologic model and start symptoms, it is not easy to reverse the reaction which has been set in motion. This is true either when they've gained enough force to start the process going and give symptoms, or where the emotional factors also aggravate already existing symptoms. Dr Rado has referred to your being perhaps rather allergic to psychiatrists and to some of the things which psychologists deal with. Very little has been said about this material, and I'd like to talk of some of the phenomena which have been found in the psychological structure of the allergic patient. Many allergic patients have been found to have a very poor relationship with the mother, the weaning process having been unsatisfactory, and all their lives they have a difficult time remedying this defect. They retain a great need for that affection which has been lost. One patient, for instance, that I have been seeing for some time had been treated by an allergist who had helped her as much as he could, and then, after he tried to help her further by psychotherapy, the psychological constellation took this form markedly in later life. She complains of a great aching void, a great need, a great emptiness. What she wants is as follows: In order of importance, she wants to be wanted as a woman, sexually; second, to be admired as an interesting person; third, to be admired in her field of artistic endeavor; fourth, to be admired as a friend, and only lastly, does she want to be admired as a wife and mother, because that involves more responsibility, which she cannot take. I said, "If you could have these things the way you want them, would this

great void be filled?" She answered, "It's hard to think of loving and being loved without anxiety and tension. I feel that if the people found out what a dope and a stinker I am, they would stop loving me completely." So we see that after a long time, this very difficult psychological problem remains in this person, and even though she has improved with psychological treatment, with the combined efforts of allergist and psychiatrist, she still is not completely well.

Now, just a word about how the allergist can add to his armamentarium of treating the allergic patients with the tools of psychiatry. It may seem presumptuous for me to come here as a guest and tell you what you might add to do a more effective job. But since you've been so friendly as to invite us psychiatrists here, I feel it is my duty to say what I think. And so it would seem that if this group does honestly want to include more of psychology in its treatment, then the young men entering the field would have to spend more time in gaining a greater knowledge of psychodynamics. And then it logically follows, I think, that the members of your organization responsible for training might get together with the psychiatrist and together try to determine what would be the optimum, or at least the expedient, amount of time that could be spent in gaining this knowledge, and how it could be used most effectively for the patient.

In addition to thinking of who is going to handle the allergic patient, we must think of how the allergic patient is going to get the most effective treatment, for there remains a wide gap between those patients who are given a certain amount of psychiatric treatment by every allergist and the few who are treated intensively by the psychiatrist, and those who are not getting enough treatment of a psychiatrist.

I don't know if you have more of yours, but might I say in our defense that up to now we have been trying to help more with the emotional factors in various specialties—trying, as you might say, to be all things to all fields of medicine which we naturally cannot do entirely effectively. I foresee that certain psychiatrists in the future, after being equipped in their psychiatric techniques, are going to come back to a certain specialty such as yours and intensively take up and study with you some of the problems in your field.

May I say one last word about the combination of psychiatric knowledge and knowledge of allergy. Those of you who are teaching can make an alliance with psychiatrists in your hospital

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or medical school, and have them study with you the cases presented to the medical students, in order that they come to see as much as possible of the emotional factors in these cases. Similarly your practice in your day-to-day life might be made more interesting if you could make some such alliance with a psychiatric colleague. As a very peaceful and remarks in the psychiatry within the structure of your specialty, which was, I think, what Dr. Abramson was aiming at when he gave us his excellent paper.

Dr. M. Murray Peshkin, New York, N. Y.—It is good to be here this afternoon despite the heat and the humidity. A new chapter in the history of allergy is being unfolded. We allergists have elected, courageously, if I may say so, to dwell for a few hours (and that is enough for an initial exposure) in a new allergy climate; allergy plus psychodynamics, which is as good an explanation as any for the current hot and humid spell. This unfavorable atmospheric condition was counted on to make things much warmer for our guests, the psychiatrists, but thus far the psychiatrists and the allergists seem to be bearing up pretty well. One would never have dreamed that this panel discussion would end up in a mutual understanding of the subject matter. This is by no means a sign of weakness on the part of the allergists, but rather a sign of progress and strength of purpose. We allergists know the value of team work and so have carried the ball to the psychiatric team with the hope that both teams will carry it together to the goal of ultimate and constructive benefit for the chronically sick allergic patient who, like the ball, has been and still is being kicked about plenty.

This panel was conceived and nursed by Dr. Abramson. We have been accustomed to honor him for his many works in medical research. Now, we are further indebted to him for his vision in making it possible for all of us to engage in oral or silent participation on "Psychodynamics and the Allergic Patient." However, I think we should remember the fact that it took courage, imagination and vision on the part of the American College of Allergists and its Board of Regents to encourage and support this program.

Dr. Abramson has introduced some relatively new terms to us. These new terms, like many new things, are stimulating. The terms psychodynamic, psychomotive, psycho-this and psycho-that all really mean the same thing. The patient is having psychologi-

cal, psychogenic or emotional disturbance—all the same thing; in fact, old stuff. But I think the rediscovery of this subject, even cloaked with new terms, is most important for us. The wheels of progress of psychiatry in allergy have been set in motion this afternoon. We have warmed up to the subject matter as well as being warmed by it. Dr. Rado has asked an important and pertinent question, "Who is going to handle the allergic patient?"

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... in psychodynamics. When talking to sick patients, we must know not only what to say but also what not to say. It is still not generally appreciated that much harm can come to the patient when the physician indulges in loose and careless conversation. If we cannot give the patient mental aid, then we certainly should not worsen his unhappy lot.

Psychic trauma has been mentioned frequently by psychiatrists as an initiating factor in the onset of allergic conditions, especially asthma. This statement, understandably, is totally rejected by the allergist of the "purist" category. But such a statement to be accepted, patients, the initiated

... disturbance, is extremely uncommon. The fact that asthma of this type can occur is most important because psychological trauma basically has much in common with physical trauma, e.g., the various contagious and infectious diseases, as well as other conditions which are known to initiate the onset of allergic asthma in persons predisposed to allergic disease. The reason for the negligibly low incidence of "para-allergy"

... in another way the term para-allergy used in Dr. Abramson's paper

The secondary role of ... in a person  
with a chronic ... Here the aller-  
gist, especia ... asthmatic asthma who  
fail to resp ... the accepted standards of allergic practice,  
must stand by these unfortunate sufferers. He, the allergist, must

be more than a technician. He must sympathetically and humanely see the patient through his entire illness, rather than allow him to drift for himself on a sea of confusion.

In April, 1930, the *American Journal of Diseases of Children* published my article on "Asthma in Children Refractory to Treatment: Plea for a 'Home' as a Restorative Measure" (vol. 39, pp. 774-781). At that time nowhere in the country was there an institution specifically devoted to the rehabilitation of refractory asthmatic cases in which the advantages of favorable climate and environment could be put to effective use.

Since 1940 the National Home for Jewish Children at Denver has undertaken the long-range care of asthmatic children. This embraces a specific medical, social and psychiatric approach to the management of chronic allergic conditions especially in children suffering with chronic asthma who were not responding to the accepted standards of modern medical treatment in their own communities. This group of children comprise at least 10 per cent of all children suffering with asthma.

Asthma is primarily a childhood disease. Many adults with asthma first contracted it during childhood. It is natural, then, from the standpoint of rehabilitation to concentrate on the asthmatic child. The lot of the chronic refractory asthmatic child is indeed tragic. Children with chronic asthma are frequently retarded in physical development and, as a consequence, are stunted in growth. These observations are not generally appreciated except by those whose work and interest are entirely confined to this problem.

I have seen children subsist on little food because they have learned that a certain combination of foods, or a full-sized meal, caused increased suffering. They appear and are anemic. Many children are confined to bed practically all the time. They acquire a stooped position. They are apprehensive. Their pale, anxious faces and appealing wide-open eyes are the tell-tale expressions of the constant struggle for air. The drone of continual wheezing not infrequently causes attacks of mental panic. They look like little old people. The situation too often appears hopeless.

What is the child's attitude? The child often becomes suspicious and antagonistic to the physician and to all treatment. He becomes aware of his physical inferiority and so cannot compete and cope with normal children. He cannot even do what a compensated cardiac child does. He thinks quietly to himself, and too often. These introspectives I call the "Little Thinkers." They distrust people because they have pinned their faith and hopes on so many who have failed them. The joy of living is denied them. These children often develop antisocial complexes.

Eventually the child becomes pampered. He has learned to take advantage of his parents. What he doesn't want to do he frequently doesn't do. He is denied the opportunity to play and talk normally with other children, and so he does not live a child's life. Finally, he does not even think and talk like a child. Is it any wonder? He is forced to live among adults who, of necessity, are charged with the responsibility of imposing restrictive measures. Such an existence may lead to a fixed habit, and as a consequence a psychogenic neurosis becomes a far greater problem to cope with than the primary asthma. Add to this a lack of normal school training. What a difficult situation!

It has been suggested that the chronic asthmatic child is smarter than he appears. I am not convinced. Be-  
 child who is obliged  
 is bound to talk and  
 appear older than his age. In some cases he becomes a mental cripple.

How are the parents affected? I have seen homes broken up when a child developed chronic asthma resistant to treatment. Mothers manifest emotional instability and fathers are swayed between patient sympathy and cruel indifference. When parents dote on the child, the child learns to use such fixed devotion to satisfy his whim and fancy. A brother and sister learn to cater to the sick one, and in due time they, too, become engulfed by neurogenic disturbances. A desperate situation for the family!

Not infrequently a complicating neurosis becomes the dominant factor of asthma. I recall the case of a girl, ten years of age, who boldly demonstrated hatred for the mother and took every means to show her love for her father. He was a butcher whose working hours were between 4:00 and 12:00 p.m. If the girl desired her father's attention in the afternoon, she obliged with an attack of acute asthma. The father did not go to work. He sat by his daughter's bedside and tenderly held her hands, bemoaning her fate, until the attack subsided. On the days he was  
 midnight  
 our, well  
 "attack"

for his tardiness. Through much persuasion the parents consented to the removal of the child to a foster home where the parents were not permitted to visit the first six months. The child, as a result, rapidly gained weight and remained free from asthma.

What are the consequences when parents take matters entirely in their own hands? I told the parents of one child that their son needed a radical change of treatment and suggested, among

be more than a technician. He must sympathetically and humanely see the patient through his entire illness, rather than allow him to drift for himself on a sea of confusion.

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heads in the sands of unrealistic compromise. We can begin to find the solution by examining frankly the entire subject to see what honest meaning it has for us.

Dr. Rudolf L. Baer, New York, N. Y.—The subject of this discussion already has been very well covered by the previous speakers. Thus far, there have been remarkably few disagreements and much less controversy than I have heard expressed in other discussions on the importance of psychosomatic factors in allergic diseases. I shall engage in this discussion to represent the viewpoint of the dermatologic allergists and shall restrict my remarks to the importance of psychosomatic factors in allergic dermatoses.

The dermatologic allergist is necessarily greatly interested in this subject because there is probably no other field of medicine in which the laity as well as an appreciable percentage of physicians have a greater tendency to blame diseases on "the nerves" than in dermatology. Everything from an acne pimple to a skin cancer is blamed on "the nerves" by the layman and everything from atopic dermatitis to psoriasis has been attributed to "the nerves" by some physicians. However, if we want to stick to scientific approaches and facts, we must ask ourselves what proof is there up to the present that psychic factors play a causal or contributory role in allergic dermatoses and if there is such proof, how important are these psychic factors as compared with the other factors contributing to the disease.

We all agree that one cannot separate the psyche from the soma or the soma from the psyche. Surely, the psyche and the soma both influence to some degree everything that goes on in the human body, whether it be a physiologic or a pathologic process. Granting that disease in general is not due to one single factor but occurs due to a combination of factors or a chain of

secondary importance. Measles cannot be produced without the measles virus, the major causal factor. Hives due to phenobarbital cannot occur without exposure to phenobarbital, the major causal factor. Allergic contact dermatitis is due to

other procedures, the removal of the boy to a high and dry altitude. With little concern for my plan of treatment the father with his entire family went West and encountered serious financial difficulties. The boy remained asthmatic. Moving to the West was a tragic blunder because the boy required not only a change of climate and environment but also medical supervision and separation from his parents, in other words, "parentectomy"!

Despite all the scientific progress made in the study of asthma, far too many doctors and laymen maintain that "Nothing can be done for the asthmatic patient, so why bother with treatment; try a change of climate. He will outgrow the asthma." Many parents have taken such advice, and, unfortunately for many, the experiment proves a failure. It is not feasible nor logical to send all children with asthma to a different climate and expect such a change alone to work miracles. In order to prevent any waste of effort and money in the case of the underprivileged child with asthma resistant to treatment, a change of environment or climate or both, when indicated, should be carried out only on the advice of, and with the medical supervision of, a competent allergist.

Advice alone cannot possibly solve the plight of chronic asthmatic children. What will become of these medically and socially orphaned children? This problem can be solved only by the concerted action of the physician, the social service worker and proper lay groups.

The role of the social worker as a liaison officer between the physician and the child and family is indispensable. Her services are so obviously essential that this phase of the problem needs no comment.

The lay group, through its moral and financial support, forms the foundation upon which rehabilitation of the child is achieved. The need for a long-range program is essential for the restoration of these children to a state of health. Moreover, if these children are to live normal and happy lives and become useful citizens, they must receive proper education, training and character building. The physician, the social worker and the citizens of our community are the team to make all this possible.

A "home" where these unfortunate children can be sent for a period of years, if necessary, is not only an urgent need but also represents rational humane treatment.

In the final analysis, mental and physical rehabilitation of the chronic allergic patient is our responsibility. We are not going to find the solution by uttering pious generalities or by ignoring disagreeable facts. We are not going to find it by hiding our

physiologic functions of the autonomous nervous system, such as sweat secretion, vasoconstriction, vasodilatation, sebaceous secretion, itching, et cetera, are greatly influenced by emotional factors.

If there is abnormally great sweat secretion due to emotional factors, then a woman with an allergic sensitization dermatitis due to dyes in dresses will surely extract more of the sweat-

vasodilatation produced by the emotions via the autonomous nervous system.

This contributory action of emotional factors is particularly important in itching, which in most allergic dermatoses, though not in all, is a very important symptom. But it is important to realize that itching, just as sweat secretion and vasodilatation, is a physiologic function. We all itch all the time. If you look around in the audience here you will see somebody scratching his cheek, somebody else rubbing his knee, et cetera. That is because we all have itch stimuli continually occurring in our skin; yet only when the threshold for the conscious perception of itch stimuli is lowered, which can occur due to emotional factors, then stimuli which are normally not perceived are perceived, or stimuli which are normally not sufficiently strong to be noticed by the patient get sufficiently strong to become conscious. Such weak stimuli as a draft of air, a minute pearl of sweat, a fiber from the clothing may then give rise to itching.

Unfortunately the fitable and annoying, or dermatoses is one which experimental work. I am among the many examples which I have observed, I shall take only two, one a clinical observation and the other one an experimental observation.

Mrs. X had severe pruritus vulvae associated with a vulvar and perivulvar eruption. This pruritus had continued for six months and usually had been worse after sexual intercourse. Mrs. X had been examined by a physician who told her that her pruritus was due to "nerves," an explanation which sounded very plausible because of the specific times at which her attacks of itching took place. However, further study showed that Mrs. X had used petrolatum as a lubricant during intercourse. Patch tests with



be proven to be the *major causal factors*. My answer is that I have never seen such cases. In a sense, the question which I have just put is an unfair one, since by definition any case in which psychic factors were proven to be the major factors could no longer be considered a case of allergic dermatosis. By definition of allergy, such a dermatosis has to be based on a specifically acquired alteration in the capacity of living tissue to react to a substance. This may sound like playing with words and definitions, but it is not. If we want to discuss allergic diseases, we must restrict ourselves to diseases which fulfill the requirements of the word "allergic" as coined by Von Pirquet. Thus even if I had seen a case of urticaria or atopic dermatitis or eczema in which a psychic factor could be thought to have been the major causal factor, and I have not seen such cases, then these cases would have to be considered examples of *nonallergic* urticaria or atopic dermatitis or eczema.

The next question which arises is whether, in some cases of allergic dermatoses, psychic factors can act as *major trigger factors*, i.e., as eliciting but not as causal factors. Here there is some evidence that in occasional cases psychic or emotional factors may act as trigger factors eliciting a response in a disease mechanism which has been well established through repeated elicitation by *allergic factors*. Dr. Abramson's case of hives, which were originally thought to be due to aspirin but then were found to be due to emotional factors, may be such an example. It is quite possible that in this particular case the hives were originally due to an allergic sensitization to aspirin and could subsequently be elicited by emotional factors, acting upon a rather "well-oiled" urticaria mechanism. Other examples in this category may be cases of so-called cholinergic urticaria due to psychic factors. I have not been fortunate enough to see such cases but reports in the literature suggest very strongly that in this type of urticaria attacks can be brought on by psychic factors. In such cases the patients are said to have developed an urticarial skin hypersensitivity to acetylcholine. Attacks of urticaria could then be precipitated through the release of acetylcholine through emotional factors via the autonomous nervous system.

We must now ask a *third question*, namely, whether in allergic dermatoses psychic factors can be *contributory factors*, i.e., factors of secondary importance. The answer here is that the number of such cases is probably considerable. In these cases, as Dr. Fremont-Smith explained better than I could, the pathways for the mediation of the emotional factors are the autonomous nervous system and the endocrine system. Obviously, the

One of the worst and most frequent mistakes made in evaluating a case is that if one can find a factor that *must* be the cause, or we can find a factor that is *not* the cause, then to conclude that if in a given case we cannot find allergenic causal factors, the causal factors must be psychic. Just as in all other

cases and psychiatrists will lead to further progress in the use of the psychodynamic approach.

Dr. John A. P. Millet, New York, N. Y.—I expected to be very respectable and read a written discussion. Then I had a negative suggestion from one of my colleagues who said, "Are you going to read a discussion?" Well, I have written one anyway, and that should make me respectable. Dr. Peshkin started me off on a lot of free association, which leads me to tell you that after the first World War I came back without a nickel in my pocket and with two children to raise. I was then an internist, and I said to my old chief of medical service, "What can I do?" After a moment's reflection he said, "Well, there isn't any allergic specialist around here. Why don't you become an allergist?" So over night I became the practicing allergist in the community. Well, after the rape of the "fair Allegra" I was seduced by a more intricate personality and became a devotee of Psyche.

The French have a proverb which some of you undoubtedly have heard. "*On revient toujours à ses premiers amours*," meaning everyone comes back to one's old or one's first love. So, a few years ago, I asked for an appointment in the Department of Medicine at Columbia because I thought I would like to do a little snooping in the Dermallergy Clinic. I thought I might be more acceptable there. This, I thought, was a good idea. After a few years of this, I thought I should add,

by the way, that before abandoning the practice of allergy I had a hay fever patient who announced to me, after I had unsuccessfully tried to desensitize her, that she never had hay fever when

the petrolatum employed produced a strongly positive, eczematous response, demonstrating that her pruritus vulvae was not due to a psychosomatic mechanism but that she had one of the extremely rare instances of allergic eczematous contact-type sensitization to petrolatum.

The second case which I shall cite is one of which I was reminded when Dr. Fremont-Smith mentioned the case in which somatic changes were produced under hypnosis.

A psychiatrist, who knew our interest in this subject, asked Dr. Sulzberger and myself to come and see a patient in whom he could produce blisters by suggesting "burning" under hypnosis. He put this patient under hypnosis and then suggested to the patient that he was burning him with a match or a cigarette; actually he was just touching the patient's skin with a pencil. By this procedure he had been able repeatedly to produce blisters on this patient's arm. Dr. Sulzberger and I took the time to see this phenomenon, the existence of which neither one of us believed. The psychiatrist, in order to be absolutely safe, had again carried out this experiment in the morning just before we came to visit, and the experiment had been successful. He then proceeded in our presence to put the patient under hypnosis and to go through with his "burning" routine. After the "burning," Dr. Sulzberger said, "I think that you'd better cover up the area where you suggested that he would get the burn, so that there's no possible error in your experiment." We put a small cardboard box over the area and a bandage around it, and marked it so that it could not be removed. Well, this was the first time this patient did not develop a blister in the "burned" area.

The most reasonable explanation for the difference in the result of this experiment and the previous one was that in the previous experiments the patient under posthypnotic suggestion had burned himself with a cigarette during the hour or hour and a half during which the psychiatrist left him alone before he came back to look at the result of the "burning." We tried the experiment again in the afternoon, and in order to rule out the possibility of pressure from the cardboard box interfering with the experiment, the psychiatrist suggested "burning" in an area on the back which the patient could not reach with his hand and which we would not have to cover. Again no burn appeared. But about five minutes after the patient had come out of hypnosis, he started to try to reach the area on the back with his hand indicating that he had some sort of posthypnotic sensations in the "burned" area.

reaction. Now those patients are very difficult to convince that their trouble is not still an allergic trouble. Why do they resist such a changed interpretation? Because the allergy has grown to function, no matter what its original causes may have been, as a convenient escape mechanism, through which they are able to avoid facing rather deep-seated conflicts in the personality.

dynamic and sophisticated? The suggestion was made by Mr. English that you teachers of allergy could draw the psychiatrists more into your counsels. I think we each need to learn a good deal of a recent experience concerning wealth and the practice of medicine.

practicing physicians in a short postgraduate course could learn the gist of what psychiatry has to offer in the understanding and treatment of psychoneurotic patients. The success of this experiment is well attested by the follow-up study made by the Commonwealth Fund. The testimony of the twenty-five practicing physicians who participated in these seminars was almost unanimous that the two weeks' training had proved an invaluable help in their practice.

Now, I would think that in any city of any size, or in any community where there are more than two allergists and two psychiatrists, it might be possible to arrange discussions, forums to exchange ideas, and to be for this joint committee.

for the working out of an appropriate standard method of history-taking, which would then make the data of the allergist more readily assimilable by the psychiatrist in case he were called in, and would make the allergist more sensitive to the type of criteria calling for psychiatric evaluation. There is a possibility that if this were conscientiously done it might develop a great deal of interest in the psychological side of the treatment of allergic cases. At present, the psychotherapy in many instances is of

she was pregnant. I was, unhappily, not able to cure that aspect of the disease, and that perhaps was one of the things that led me to desert the fair Allegra.

In this dermatology department I found that certain cases that were diagnosed atopic dermatitis had only a few minor sensitizations of the skin, and that, after various attempts to desensitize them had not worked out, the experiment was being tried of sending these patients out to Arizona on funds that had been made available to the professor of dermatology, because it was felt that many such cases had cleared up from these very disabling conditions under the influence of the Arizona sun. Well, it seemed to me that that was a rather unscientific approach, both to the problem of causation and to the rationale of therapy. There were numbers of letters coming from these patients who had been down there, full of enthusiasm about the Arizona sunshine and its particular qualities. At that time I was responsible for a psychotherapeutic unit up in the Adirondacks where I believed that the sunshine probably was not too bad. I asked permission, therefore, to take over one or two patients who were not available for this form of absent treatment because of their domestic ties and responsibilities. I had them up there for a period under observation, during which time every attempt to desensitize them in the ordinary way was abandoned and they were given a rather thoroughgoing psychotherapeutic workout. These cases are to be published, so I will not bore you with the details. But the simple fact is that with the removal from the traumatic environment, and coming to a better understanding of the dynamic processes that lay behind their disturbances, they all got well.

Now, obviously one might say that one might draw too sweeping conclusions from this type of experiment. What is the therapeutic factor involved? Certainly, these people had some degree of allergic constitution. I think that it's important for us to inspect our own medical thinking, and, particularly, to inspect the medical thinking of patients who have been under allergic treatment for a long time. This point has been brought out before. Although I had found reasons to feel critical of some of the thinking of the dermatologists, I am not trying to substitute my own as the perfect answer. I had, however, had experience with allergic patients who had multiple allergies, who were rather successfully treated by desensitizing methods over a period, who were then said to be desensitized by their allergists, but who continued to have symptoms that were very much the same as those which had previously been explained to them on the basis of allergic

the authoritative presentations by those who have preceded me have clarified in my mind a great many points of confusion, so that now this entire problem assumes much more definite proportions.

From an academic as well as a practical standpoint, it would be well if we could assign definite etiologic classifications to every allergic disorder. On the other hand, I am sure that all of us occasionally have attributed successful management of allergic patients to specific measures when such treatment could by no means have been the entire mechanism involved. After several years of practice, we become sufficiently experienced so that we usually can separate those cases with clear-cut allergies from those with only questionable or at least undetermined backgrounds

... encouraging and reassuring the doubtful patient, in the hope that we can follow him long enough to solve his problem eventually and thereby attain improvement?

Permit me to mention a few instances in which psychosomatic factors have very definitely influenced the outcome of certain patients under my care.

A woman ... I had more asthma every  
... would be much better

Eventually, a sprained ... necessitated her remaining at home with her family for a few weeks during which time her asthma improved. After prolonged observation, no other cause except obvious psychogenic factor could be determined for her asthma. From a practical therapeutic standpoint, however, this conclusion was of little value, inasmuch as she insisted on remaining in the ministry.

Another actually allergic patient had two allergic children. In addition to dust injections which they needed, the mother insisted that all three receive ...

possibly ... mine to ... good re ... than spe ... histamin ... denly be ... naturally wanted to help her and the children if possible; conse-

a rather amateur type, and is sometimes used in cases where a more expert kind of psychotherapy is indicated. Are there any ways in which such a danger might be avoided? I think there are. I think there are some projection tests, as for instance the Rorschach examination, which would help to make a quick decision as to the degree and type of emotional disorder lying ambushed behind the allergic shrubbery.

To sum up, then, I feel that the unsolved problems in the field of allergy provide one of the happiest hunting grounds for the co-operative pursuit of the illusive fox, causation. This opportunity has been to a large extent by-passed because of the predilection of various groups of medical scientists for their own ivory towers.

In order that we may begin to organize the pursuit more effectively, I would suggest the following practical steps:

First, the giving of the fullest possible publicity among medical circles to the joint discussion held here this afternoon.

Second, the appointment of a joint committee for planning and research composed of three members of the American College of Allergists, three qualified specialists in the field of psychoanalytic psychiatry, two internists, one biological chemist, and one clinical pathologist whose field of research includes hematology. The function of this commission should be to formulate a standard type of anamnesis and follow-up records, whose adoption should be urged upon all teaching institutions and specialists who wish to engage in the accumulation of data for clinical investigation.

Third, the planning of semi-annual regional conferences between specialists in the fields of allergy and psychiatry, and the inclusion in the annual programs of the leading national groups of allergists and psychiatrists of one program during the year devoted to an exchange of views and reports of progress in research.

Fourth, the encouragement of joint seminars conducted by allergists and psychiatrists as part of the teaching program during the fourth year of medical school curriculum.

Fifth, the formation of small groups of actively interested specialists in every center of medical teaching to spearhead the development of regional programs and the stimulation of research.

Dr. Homer E. Prince, Houston, Texas—I wish to assure you that I have thoroughly enjoyed hearing the various viewpoints of this very important subject. Furthermore, I must confess that

plaints, and, if he wishes, about his personal life. A very important additional procedure is the concise reflecting statements which the interviewer makes when the patient pauses to collect his thoughts. In a brief phrase, or sentence, the interviewer mirrors to the patient the emotional content of his previous statement. Perhaps he has spent five minutes talking about how irritated he gets at a situation where he works, and the interviewer replies, "It seems to you that the dust there is causing your asthma and you are put out because they will do nothing about it" Even when it is true occupational asthma, a deep-seated hostility to the foreman or employer may come out immediately or in a later interview.

By accepting without criticism whatever the patient says, and reflecting back to him even the slightest emotionalized content, release is encouraged. After a few sessions, the difference between allergic and nonallergic symptoms is obvious. Statements of the patient improve towards a work

home situation, may also be made. In successful cases, insights are followed by evidences of increasing personal responsibility or the illness and decisions are made which ultimately resolve many of the basic personal problems. As the patient accepts the interview experience and shows a willingness to work toward a solution of his problems, there seems to be parallel improvement in psychologic adjustment as well as in physical status. The process of change in "allergic" patients with emotional disorders is quite similar to that observed by Rogers, Curran and others in their studies of psychologically disturbed persons who came for counseling.

This procedure requires a great deal of time, although not as much as some methods of psychotherapy. One thing seems clear: there is no easy way, there are no shortcuts. One must first decide whether to assume responsibility for the care of the whole person and then have patience and diligence in perfecting the skill necessary for successful therapy with these patients.

• **முன்னிலை**

Case 1—February 7, 1947, Mr. F. R., aged forty, complains of asthma, sneezing, and nasal obstruction of two years' duration. He stopped smoking six months ago with considerable improvement in his nasal symptoms. In addition, he mentions that



quently, I have continued the pollen injections along with dust, and they are all still doing well. Psychotherapy of the minor variety? Any specific results I have attributed to the dust injections.

I could mention a third type of case, that of a young woman with severe hives from the first night following her marriage. After no specific cause could be demonstrated, and following frank discussions regarding the probable emotional element, her hives subsided within a few weeks. If the cause in this case was fear, it apparently was removed as she became accustomed to married life.

Certainly psychogenic factors play just as important a role in allergy as in any other field of medicine. Indeed, in spite of his lack of formal postgraduate training, the old country doctor excelled in the rare art of practical medicine because of a sound understanding of human nature. How much does it behoove us as allergists, then, not only to be well trained in our specialty, but also to be able to apply our knowledge in the light of the emotional variations we see in everyday office practice?

This round table should prove to be a very valuable part of our meeting, if for no other reason than that it has afforded a common meeting ground for clarifying and bringing into better understanding possible divergent opinions. I believe many of the points developed here today suggest that we have all been talking about the same thing in different languages. At least, we seem to be giving scientific explanation to facts that have been common knowledge throughout all time.

### General Discussion

Dr. John H. Mitchell, Columbus, Ohio—It seems the unanimous opinion of our experts in psychiatry and in allergy that psychogenic factors are significant in a certain proportion of patients who consult the allergist. We all know the problem exists although we may differ as to how many of our own patients need psychotherapy. The real frustration comes when we realize our responsibility in this regard and try to do something about it.

For three years now I have routinely used the patient-centered nondirective interview technique in taking histories and in subsequent interviews where psychotherapy seems indicated. This approach provides abundant diagnostic data usually in the initial interview and oftentimes surprisingly effective therapy as the interviews continue. Briefly, the method follows the well known principles in taking a medical history, namely, being a good listener and permitting the patient to talk freely about his com-

P. OK, look, here's what I just did—I made that admission see: I have slipped as a salesman—I am 45—I'm not the guy that I was ten years ago—I make that admission and deep within me, I had a feeling of relaxation—in other words a feeling of, just laugh at the thing

onths  
more  
thir-

tributes  
symp-

forms disappeared almost immediately after the good interview.

forty to the receptionist and in the interview admitted he was forty-five.

Case 2—September 8, 1944, Mr. H. F., aged forty, came for an allergy investigation, because "I have sneezing spells all year round." Since 1941, he has had frequent severe attacks of paroxysmal rhinorrhea coming on at any time during the twenty-four hours. Recently, he noticed wheezing on exertion and occasionally during the night.

The nasal mucosa was pale, edematous, and bathed in a clear watery secretion. Skin tests were negative, and the blood pressure was 144/116. Weekly injections of bacterial vaccine were given for its nonspecific effect but without benefit. Injections of precipitated sulfur in olive oil were given on three occasions with temporary improvement. He was seen two or three times each month for a period of two years, and in September, 1946, made the following statement, "If things don't go right at the shop, I get hot all over, then I sweat, then I begin to have a sneezing spell." With this clear statement of a relationship between emotional factors and rhinitis, he was referred to our counselor, Miss Ruth Myers.

In the course of the interviews, Mr. H. F. reveals his tendency to get angry and excited very readily. He feels his employer takes advantage of him in giving him too much work to do. While his company has offered him a position superior to his present one, he does not want this responsibility and yet he bitterly resents being told what to do by younger men who have accepted this position when he knows much more about the job

he has "colonic spasms," is extremely nervous, is very fearful during each asthmatic attack, and has gained 35 pounds in the past few months. The physical examination revealed moderately severe rosacea of the face, nasal polyps, blood pressure 152/108, and asthmatic wheezes in the chest. Skin tests were clearly negative. Excerpts from his second interview reveal the development of insight into the relationship between his own personal difficulties and asthma.

P: I like to be in the top place in a job—this year particularly I have not been for the reasons mentioned—that is, the reasons have been obvious there. I haven't been able to produce the orders as quickly due to the price increases, and they're taking their good old sweet time in giving the orders. Before, I was the top man in the organization, and this year I was not and that was quite a set-back to my ego, you know. It hurt on that basis. Because, in other words, you see, I have attempted to justify my eviction from a top flight position, I've tried to justify it with alibis which may be unreal. In other words, this price increase is a very real thing, so I have grasped at that quickly, you see. But maybe—maybe here's the thing—I am a good salesman—I mean I'm egotistical enough and sure enough of myself to know that I have the ability to wheedle business out of a guy—I mean after ten years of selling—I either know I can sell or know that I am a failure—and I know that I'm a good salesman. So the realization that I've been in a top flight position and have been in second place this particular year is quite a blow to my ego, see. It would disrupt the nervous system in itself, don't you quite agree?

D: It really hurt you pretty deeply. It's a personal blow.

P: Yeah, it could be responsible for this twitching—the jerking—it's so I can't relax. Oh, golly, maybe if I get out and take a good long walk, I'll forget the whole thing, but I feel confident that maybe that's the reason for it.

D: You do trace a lot of your difficulty back to the price rise—and then as you think even further—you think maybe that could be a justification to sort of excuse yourself in a way.

P: Well, sure. Naturally, I'm not going to admit to myself or to anybody else that my sales ability has deteriorated—that's unthinkable, see. But at the same time—uh—uh—I have worried for fear that was true. . . . I won't admit it, and the refusal to make that admission is not good. If I would just admit—well, I've slipped, and so I slipped. Even that admission to myself—here—makes me feel better! O.K., I've slipped—so what. Then I can relax—I can breathe—even as I'm doing now.

D: You find it good to express those things and face them rather than blame it on something else which may not be true.

C: It seems to get clearer to you that it isn't these external things around you with which you come in contact.

P: I don't think it is—because, as I told you there a couple weeks ago, if it was any sort of pollen, or anything like that, that I would have it, you know, when I'm around that stuff, see, but I had this in the winter time when I'd be sitting in the house, and it just struck me like that see. I'd go out and be sitting down playing a game of cards, with the neighbors—or somebody might come in—I'd get excited, and just that quick it would start me, see. Yet, I knew I wouldn't be around anything in the house that would cause it, see—at the time.

C: It's pretty obvious to you that it wouldn't be anything which you were coming in contact with.

P: Now if it was any pollen—I was out squirrel hunting for a couple days—well, going through those fields and stuff—the ragweed, goldenrod and dust off the soy beans—well, surely that would have set me off, but it didn't—I didn't have anything at all like that, until that—I believe that one Sunday that I was up here—I told you about it—I had that awful spell—the week before last—I got upset about something—I mean I think that's what started that.

I don't notice me getting, well—uh—heated up like I did there for awhile I used to get awful hot—especially when I felt my temper rising. I would get awful hot—just burn up with pretty near fever, you might say, but I never got shaky. That's why uh—I asked Dr. Mitchell if he thought I needed a tonic or something for nerves—well, it didn't seem like it was at that time, see. Of course, as far as my nerves were concerned, I don't think it was my nerves at all.

C: No, it's not an actual physical nervousness from which you would shake.

P: No. I don't think that's what it was.

C: Seems to be more these emotional situations which get you aroused and bring on the attacks.

P: M-hum.

P: I controlled myself an awful lot this week, and as I said, I haven't sneezed once.

C: You've been pretty successful in that and done quite well as far as controlling yourself now that you have that realization of it.

P: Yeah. Since we've been talking—you know going through it, and seeing what it really means—'cause it seems very logical that that's probably what was doing the whole thing.

C: It seems pretty reasonable to you, now that you've thought back and connected these things together and seen the relationships, it does seem logical and reasonable to you.

than they do. He flares up very quickly at these people who tell him what to do. As he talks over these emotional situations, he notices that when he does get angry, or excited or as he rushes around when he is in a hurry, the attacks will come on. As soon as he sees this relationship, he begins to make changes in reactions to situations with a resulting marked improvement in his nasal condition.

The following are verbatim excerpts from the interviews:

*Interview 3—*

P: It seems very obvious to me that when I do rush around like that, that it brings these on, and I can always tell it. I can feel it coming on—sweating, getting hot . . . and I will say that I do get awfully excited—as I say jumpy—it's not what I would say is a downright nerve case as far as I know of because I don't feel that way—you know, most generally people that are nervous are just apt to do most anything. Well, I don't feel that way. I try to control myself as much as possible . . . and during these past three weeks I think I have overcome a lot of that myself just by realizing the fact, as I say, that I know what they are doing to me if I just let the thing go by itself. If things go wrong, just let things take their course—that's the attitude I'm taking any more . . .

In the fourth interview with the counselor, the patient reaffirms this relationship between emotional situations and the nasal condition.

P. I'm feeling fine this week. Never felt better in my life . . .

C. You've really made a great improvement.

P. I have—since I've been talking to you, and trying to keep myself controlled. I haven't sneezed once this week, and I don't think I've been excited at any time, and I don't think I've ever even felt at any time that I was going to.

C: Just the realization of that being the cause has made it a little easier for you to control yourself.

P. It has—it really has. And I've controlled myself this week—I just haven't let things get the best of me. I made up my mind to that two weeks ago. And as I say, this week I think I've been wonderful.

Because there for awhile, when I got excited, and something would happen, why I would just—in fact, you might say fly apart—and just that quick—this thing struck me.

Last night I was working outside burning leaves and stuff—you know—flowers that I pulled up. My wife said, after I took her to work, she thought, "Well, he'll probably start sneezing if he's around that smoke and stuff—" Well, I didn't. I never felt it coming on or anything at the time—nothing at all.

of these combined problems, which are quite difficult problems and cannot be solved by a single endeavor but only by a combined effort. Many of these patients have been definitely benefited by this dual management.

The second point which the Education Committee of future programs, further who are interested in this field of work and who may offer us assistance in the handling of these difficult problems.

There are other allergic manifestations, such as asthma, urticaria and the like, in which electric shock therapy has broken the episode after the patient has continued in severe asthma or severe urticaria.

Dr. Leon Unger, Chicago — I have seen many cases of migraine with onset which includes ache, nausea, and vomiting more foods are responsible for the attacks. During the program put out by Lederle over the radio some time ago, the speaker never even mentioned the possibility of allergy as a cause of migraine. We know that many of our patients have been completely relieved of their attacks merely by avoiding chocolate or milk or some other food. Yet most psychiatrists and neurologists completely ignore the possibility of the existence of allergy in migraine.

Dr. George L. Waldbott, Detroit, Mich — I cannot fully agree with some points here, that a specific atopic response is not the only way we should not blame the patient for the psychosomatic aggravation of his allergy. Indeed, we ourselves are often responsible for it. We impose all kinds of "don't's" on him; we forbid him such activities as sports and travel. We often unnecessarily instruct him to avoid many foods.

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P: Yeah, it does since you had me to bring them out there the first two or three weeks I was up here—about bringing out these relationships—when they would start, and what we thought brought it on. (pause)

C: Before you just never thought of it that way, and were looking for something you were coming into contact with—more than any of these other things

P. (pause) 'Cause if it was something I was coming into contact with—well, I would pretty near have to be in contact with it continuously, the way I was having them spells—just day after day, well . . .

C Yes, anything you figured out you would have come into contact with—it wasn't consistent.

P: Yes . . . I know I've appreciated the talks and your bringing this out so we know the extent to where it's done me some good With somebody else it may do the same thing, you know—get these things—you know—of course a lot of people may have the same thing and don't know what it is until they do just like I did with you—just go back and talk it over with you . . .

That's the answer to the question It looks very obvious that it does After the way we've talked and got things straightened out, and I've settled myself down to where I should be—well, it seems very clear that that's what the whole situation is

On June 16, 1947, he was met on the street and volunteered the information that he was getting along very well and only had minor difficulties with his nose.

Although the improvement was striking soon after the counseling interviews were started, there were no statements of insight as to just why he was so easily upset. There was no insight into possible conditioning experiences in childhood, so one might expect a recurrence later on.

*Dr. J. Warrick Thomas, Richmond, Va.—I feel that a psychiatric consultation is warranted in those cases in which there is a psychogenic or neurogenic aspect in addition to the patient's allergy. These consultations should be considered after an adequate medical, allergic and diagnostic study. It is important to keep this in mind, as many allergists are prone to disregard psychiatric consultation in such individuals. For example, there are those patients who may have a possible allergic etiology in a case of epilepsy in addition to a common or frank allergic manifestation; and one is able to offer these patients definite benefits by the co-operative efforts of the psychiatrist and the allergist.*

It has been my good fortune to have in Richmond psychiatrists who have worked in close harmony with me in the management

factors that they can bring out that we as internists or allergists don't seem able to do. But, on the other hand, the confidence of the patient and the thoroughness of the history will bring out factors through which you yourself can help without the assistance of the psychiatrist.

Dr. Harry S. Bernton, Washington, D. C.—We have been intrigued this afternoon with relatively new words—psychosomatic and psychodynamics. The fundamental thesis, however, that the mental tone determines the physical tone, is as old as the hills. The cause of allergic disturbances is still a mystery. Many theories have been advanced. The suggestion has been made in this discussion that psychic trauma may give rise to allergic states. If this is the case, I shall ask the distinguished gentlemen of the panel to explain the relatively small number of allergic patients amongst the inmates of the insane asylums of the country.

Some years ago Dr. William A. White, whose name, I am sure, is familiar to you all, very kindly granted me permission to collect pollens from the trees which beautify the grounds of St. Elizabeth's Hospital in Washington. This work goes back to my early days in this specialty; and, like my colleagues, I shall be unmodest enough to claim that I published the first botanical survey of the hay fever producing plants in the District of Columbia.

I then became interested in a study of potential allergic conditions of the inmates of St. Elizabeth's Hospital. To my amazement, it was determined that there were more allergic cases among the professional personnel than among the mentally deranged patients. This observation has since been confirmed by reports of other institutions in our country.

Dr. H. A. A. . . .

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in mind. It is convenient to illustrate the point that I wish to  
make by means of a device or diagram which I've called the  
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symptom, in this case the hive, and two sides. (In vectors, the hy-  
pothenuse can always be resolved by two other vectors, as illus-



We advise him to stay in a room without hangings or carpetings. These rooms often resemble a cage rather than a home. In doing all this, we isolate the patient psychologically, often as early as the first years of his life. *Instead, we should attempt to treat our patients in such a manner that we do not stimulate the psychosomatic tendencies which are innate in every human being, especially in those who are chronically ill.*

One of the cases quoted by Dr. Abramson illustrates our laxity in arriving at conclusions, to which of course every one of us is susceptible. The patient who suffered a reaction after an injection of pollen extract stated that he was nervous before he had his injection. This is an indication that his reaction was on a psychosomatic basis. Many patients are eager to help us in explaining the reason for the reaction, when we ourselves may have given an overdose or may have accidentally hit a blood vessel. So-called back-seepage reactions may not exhibit the typical clinical picture with which we are all familiar, but merely some flushing of the face and irritation about the mouth and similar manifestations of nervousness which are easily confused with a psychosomatic condition.

Dr. George Piness, Los Angeles, Calif—Most of the men on the panel representing the allergy side seem very apologetic for being allergists. I think the allergist needs no defense in the treatment and care of the allergic individual, providing that he is a doctor first and an allergist last. I know of no successful practitioner in medicine who does not practice psychosomatic medicine, and those of us who have had any measure of success at all have not been dependent only on the scratch or the hypodermic needle to accomplish all our results. It seems to me, too, that one would believe from the panel today that every patient we see is a psychosomatic problem. It is true that we have some, and I think those of us who have had enough experience and who have devoted time and patience to getting a decent history without taking only the patient's word, or that of the doctor who referred him to us, that he is an allergic individual, will get facts that will show us those individuals who are psychoneurotic or who have psychogenic factors associated with their allergy. I believe, too, that a psychiatrist is desirable and necessary in those cases where, as someone said, we have a major psychiatric problem. The men who treat 125 patients a day and who use roller skates to get around their offices cannot practice good allergy, nor can they take care of or determine those individuals who have psychiatric problems. I am in accord with the psychiatrists that there are

hand, there are certain cases of hives in which, as far as all available immunologic techniques have shown, the unknown theoretical or possible immunologic factors are far outweighed by emotional factors. In such cases, the emotional factors are in connection with the hives. In some cases, the emotional factors are in connection with the hives. In some cases, the emotional factors are in connection with the hives.

to illustrate the importance of psychodynamic factors. For example, in dermatographism, there is no question that emotional factors plus mechanical tension on the skin produce the hive. Similarly, there are innumerable cases reported in the literature in which the hives immediately follow episodes of anxiety or are incidental to conflict situations. These hives persist for long periods in individuals who show no immunologic allergic reaction which can be demonstrated by our present methods.

It is necessary to restrict our notions of allergy to the concept of Dr. Baer. Dr. Baer has broadened our knowledge of our new knowledge.

It is clear that all symptoms, including dermatoses, must, of necessity, be composed of two components, both psychological and immunologic. Each component fluctuates. In the cases of hives, by me, there are by far more emotional factors than immunologic factors. It is fruitless to postulate that the immunologic factors are now incapable of being outweighed by the emotional factors.

application of psychodynamics to these processes which is required for understanding and treating these clinical

trated in Figure 1). Let one of the sides, the vertical one, represent psychological or emotional factors producing the hives. Let the other side, the base, represent the somatic or physiologic factors producing the hives. *This is our basic diagram depicting a fundamental fact, that in all patients with hives, both emotional and physiologic factors must be involved. The question which confronts us is, "What is the relative importance of these factors in any particular instance?"*

When a child regularly gets hives after ingestion of eggs, fundamentally speaking, the somatic (immunologic) factors are primarily involved, with emotional factors only secondarily involved (e.g., affecting, possibly, the permeability of the intestinal tract as well as the tonus of the skin vessels). In this case, primarily

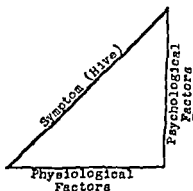


Fig. 1.

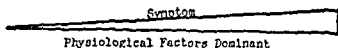


Fig. 2

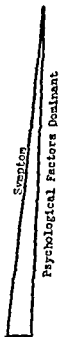


Fig. 3.

immunologic in nature, the psychosomatic triangle should be drawn differently to illustrate the case as in Figure 2. The base of the triangle in this case, the physiologic process, should be made long, compared with the vertical side representing the emotional processes, to illustrate the relative importance of the forces at play. The emotional side (vector) never disappears entirely. On the other

ceived from very able psychiatrists somewhat along these lines: "You will find it in my forthcoming volume," or "in my last thirty-two papers" But not one of them—and this letter was sent out to some twenty of them a second time a few years later—sent me a brief description. Were we to ask you for a brief description of what you mean by allergy, I think we might run into the same difficulty. I think many of you could write such a brief description, but it wouldn't agree with descriptions written by others. As one of you said so wisely, the fundamental basis of allergic reaction is unknown; I'd like to say the fundamental basis of neurotic reaction is unknown. We have to start from that basis, but we have some knowledge of both allergic and neurotic reactions and we can gradually add to it.

My last word is with respect to our being physicians, and the need, first of all, for active leadership by physicians in national and international affairs.

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...individual as a  
whole in his relationship to society. Through this viewpoint,  
medicine has a real liaison with social sciences because the allergist  
or the pediatrician or the general practitioner  
is dealing with the social  
relationship to his family and  
other groups. These same unrecognized motivations operate in  
group problems, and we are in a world today where unrecognized  
motivation is...

...the broader sense of the word; and we are  
not going to deal with health, nationally or internationally, unless  
we take cognizance of these... both in  
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### Closing Discussion

Dr. Frank Fremont-Smith, New York, N. Y.—I think that the difficulty is that we have been brought up too much, both the psychiatrists and the other specialists, to think of single causes. We are learning from the physicists that they no longer think of single causality but rather of multiple causality and concatenations of events. Therefore, we do not have to consider, for instance, when we are dealing with a rectangle, which is more important, the length or the breadth, since they are both essential to a rectangle, and you don't have a rectangle without them; but you may have a rectangle that is nearly a square, or one that is very much elongated. I don't think there is any question in our minds about psychological factors being at any time the whole or the only cause for an allergic reaction, or for any other reaction. Someone in the very beginning of the discussion said that we only can think of an individual as carrying with him what he was born with, and what he has experienced since birth. Now, it's perfectly evident then that many factors enter into any form of behavior. An allergic reaction is a form of behavior; and internal environmental factors, past historical factors, hereditary factors and external environmental factors, which may be psychological and may be nonpsychological, all operate to some extent. It is our job to disentangle not only their relative importance but, what is more important, their specific importance. Because when we know their specific importance then we can deal with them.

I want to refer briefly to one or two points. During the last few years, extraordinarily interesting work has been done by Dougherty and White at Yale on the release from the lymph glands by a dissolution of lymphocytes, of immune bodies and immune gamma globulin and antibody globulin into the lymph, and hence into the blood stream, when the adrenal cortex is stimulated to function. That release is very prompt. Now we know that the primary cause of the adrenal cortical release emanates from the anterior pituitary; and we also know that the adrenal cortex is so stimulated by a known specific variety of stimuli, which may be stresses of any kind. I believe that we have a mechanism there that is well worth studying as a basis on which some immunological reactions may be modified by emotional stress.

I also feel there is much to be learned on the part of the psychologist, and perhaps on the part of the allergist, regarding fundamental problems. Some years ago I wrote to a group of psychiatrists and asked them if they would briefly describe to me how they use the term *neurosis*. A number of replies were re-

